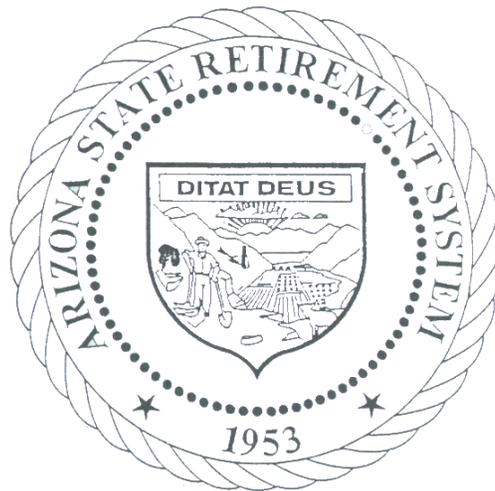


# **THE ARIZONA STATE RETIREMENT SYSTEM**

## **COMPREHENSIVE ANNUAL FINANCIAL REPORT**

### **A COMPONENT UNIT OF THE STATE OF ARIZONA**



**47TH  
COMPONENT UNIT FINANCIAL REPORT  
FOR THE YEAR ENDED JUNE 30, 2000**

# **ARIZONA STATE RETIREMENT SYSTEM**

3300 North Central Avenue, Suite 1300

Phoenix, Arizona 85012

**The 47th**  
**Comprehensive Annual Financial Report**  
**of the**  
**Arizona State Retirement System**  
**A Component Unit**  
**of the**  
**State of Arizona**  
**For the Year Ended June 30, 2000**

James A. Jenkins

Chairman

Arizona State Retirement System Board

Chuck Essigs

Vice Chairman

Arizona State Retirement System Board

Report prepared by the Arizona State Retirement System Staff

LeRoy Gilbertson

Director

# ARIZONA STATE RETIREMENT SYSTEM

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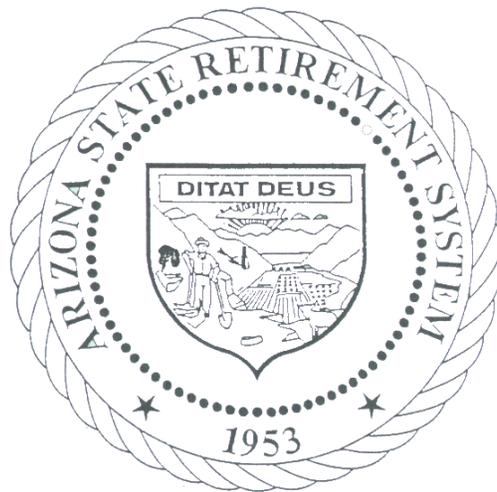
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# INTRODUCTORY SECTION



November 22, 2000

The Honorable Jane Hull  
Governor of Arizona  
State Capitol  
Phoenix, Arizona 85007

Dear Governor Hull:

On behalf of the Arizona State Retirement System Board, it is my pleasure to present you the 47th Comprehensive Annual Financial Report ("CAFR") of the Arizona State Retirement System ("ASRS"). This CAFR includes pertinent financial statements, investment information, actuarial data, and statistical data. The CAFR also includes ten-year summaries of a variety of indicators that affect or reflect ASRS operations.

The actuarial valuation performed by Watson Wyatt Worldwide at June 30, 1999 indicated that the ASRS, through proper management and prudent investment practices, maintained a fully-funded status throughout the year. During the fiscal year ended June 30, 2000, the total rate of return on investments was 10.0 percent

The 1999-2000 fiscal year employer and employee retirement contribution rates were both 2.17 percent. The actuarially recommended rates for 2000-2001 fiscal year employer and employee, as determined by Watson Wyatt Worldwide, are both 2.17 percent.

Respectfully submitted,

James A. Jenkins  
Chairman  
Arizona State Retirement System Board

November 22, 2000

Mr. James A. Jenkins, Chairman  
Arizona State Retirement System Board  
3300 North Central Avenue  
Phoenix, Arizona 85012

Dear Mr. Jenkins:

I am pleased to present the 47th Comprehensive Annual Financial Report (“CAFR”) of the Arizona State Retirement System (“ASRS”), a Component Unit of the State of Arizona, for the fiscal year ended June 30, 2000. Title 38 of the Arizona Revised Statutes requires the ASRS Board to submit an annual report to the Governor and the Legislature within eight months of the close of each fiscal year. This report complies with all legal requirements governing the preparation and content of annual reports.

This CAFR consists of five sections. The Introductory Section includes the Board Chairman’s letter to the Governor, this Letter of Transmittal, our Government Finance Officers Association (“GFOA”) Certificate of Achievement for Excellence in Financial Reporting Award for last year’s report, a summary of the ASRS administration structure, a list of consultants providing service to the ASRS, an organizational chart of the Agency, and a summary of the 2000 retirement legislation. The Financial Section includes the Independent Auditors’ Report, the ASRS combined financial statements, and supplemental schedules. The Investment Portfolio Section presents a listing of ASRS investments as well as supplemental schedules. The Actuarial Section includes the independent consulting actuary’s certification statement, a summary of benefit provisions, the results of the most recent actuarial valuation, the ASRS financing objective, and general actuarial information. The Statistical Section includes information concerning the membership, benefit payments, and additional financial data. The management of the ASRS is responsible for the information presented in the CAFR.

### **History and Overview**

The ASRS was created in 1953 to provide defined contribution retirement benefits to employees of state, university, and political subdivisions in Arizona. Arizona teachers voted to join ASRS in 1954, effective January 1, 1955. In 1970, the state legislature authorized the creation of a defined benefit plan contingent upon the election to transfer at least 70 percent of ASRS membership. More than 80 percent voted to transfer to the “plan” effective July 1, 1971.

At the end of fiscal year 1999-2000, total ASRS membership, including active, inactive, and retired members is nearly 331,000, and the number of ASRS employer members is 455, including school districts, state colleges and universities, and local, county and state governments.

November 22, 2000  
Mr. James A. Jenkins  
Page Two

In addition to pension benefits, the ASRS provides a health insurance premium benefit and sponsors medical and dental coverage for retired members. Active members receive long-term disability insurance coverage equal to two-thirds of pay at the time of disablement.

The ASRS staff provides administrative support to the ASRS Board to carry out the ASRS statutory mandates. More than 58,000 retired annuitants, their survivors, and disabilitants receive a monthly benefit totaling in excess of \$60 million. More than 38,000 retired members are enrolled in the ASRS sponsored medical or dental plans.

### **Fiscal Year 2000 Developments**

ASRS Board members are appointed for three-year terms by the Governor and confirmed by the Arizona State Senate. Four members of the Board must have a minimum of ten years investment experience. There is no limit on the number of terms that a Board member may serve. During the 1999-2000 fiscal year, there was one appointment to the Board. Bonnie Gonzalez was appointed March 15, 2000 and represents State employees. Her term expires January 20, 2003. The following Board members were reappointed to terms that expire on January 20, 2003:

- Ray Rottas
- Alan McGuire

During the 1999-2000 fiscal year, the ASRS implemented the following legislative mandates that required significant staff commitment:

- An enhanced refund program, which entitles non-retired members who leave the system a refund from 25 percent to 100 percent of the employer contributions depending on their years of service at departure.
- A permanent increase in the retirement formula multiplier from 2.0 percent to 2.1 percent.

These and other legislative changes are summarized elsewhere in this report.

In addition, during the 1999-2000 fiscal year, the ASRS accomplished the following:

- Achieved Y2K Compliance with no interruption in service.
- Achieved the status of the 2nd best performing public pension fund in the United States.
- Continued development and migration to ASRS' new computer database, PERIS (Public Employees Retirement Information System). This fiscal year saw applications completed for Contribution Reporting, Accounts Receivable, and Health Insurance.
- Analyzed and adjusted the asset allocation of the Health Benefit Subsidy and Long-Term Disability funds.
- Created and implemented an enhanced credit monitoring system for the fixed income portfolio.
- Enhanced telephone services by integrating the Tucson office and health insurance vendors into the call center. These changes have significantly reduced the call abandonment rates.
- Continued to expand and/or create performance measurement systems that will track and report on service levels versus service objectives.
- Continued to expand and/or create quality review systems to ensure the accuracy of information sent to members.

#### **ASRS Information Technology Plan**

This year, staff completed the development of and received Board approval for a seven-year information technology plan ("IT Plan") for the ASRS. The IT Plan, if approved and funded by the legislature, will eliminate the manual processes that exist today and move the ASRS toward full automation of its processes and services.

An estimated 70,000 members will become eligible for retirement in the next decade, resulting in a 75 percent or higher increase in the number of retirees. To prepare for the increased demand for services that is certain to accompany this growth in retirees, the ASRS has chosen an integrated approach that combines a modest staff increase with the latest technological advances available.

Once complete, the IT Plan is expected to accomplish the following:

- Conversion of all current and historical members records to an electronic format.
- Reduction in the risk associated with maintaining large numbers of paper files and records that could not be replaced in the event of loss.
- Increased productivity *without* large and constant infusions of permanent staff – escalate the retirements to staff ratio from approximately 60:1 to 80:1.
- Provide more regular and instantaneous service by telephone, Internet, or videoconferencing link to all areas of our state.
- Creation of the infrastructure that is needed to conduct business with members and employers over the Internet (secured transmission of forms and contribution data).
- Provide secure access to account information, benefit estimates, service purchase estimates, or financial planning tools anytime and anywhere over the Internet – without requiring the assistance of a Benefit Advisor.
- Creation of a computer system that can readily respond to legislative requests for benefit changes or enhancements.

**Economic Conditions and Outlook**

The U.S. economy continued its current, lengthy expansion over the course of the year. Growth was high in the third quarter of 1999 with Gross Domestic Product (“GDP”) rising at an annual rate of 5.7 percent from the prior quarter’s annual rate of 2.5 percent. Also during the third quarter, the unemployment rate declined slightly from 4.3 percent to 4.2 percent. The economy accelerated its growth in the fourth quarter of 1999 with GDP rising at a stunning annual rate of 8.3 percent. The unemployment rate dropped to 4.1 percent, its lowest level in 30 years.

The current expansion entered a record 10<sup>th</sup> year at the beginning of the second quarter of 2000. The economy grew faster than expected in the second quarter, as the GDP growth rate rose at an annual rate of 5.3 percent. The unemployment rate edged down to 4.0 percent in this quarter. The combined effect of higher GDP rates and lower employment caused the Federal Reserve to raise interest rates six times in the last 13 months, ultimately raising rates to a nine-year high of 6.5 percent.

**Financial Information**

The management of the ASRS is responsible for maintaining a system of adequate internal controls. The system of internal controls at the ASRS is designed to provide reasonable assurance that the assets of the ASRS are protected, that financial transactions are executed in accordance with State policy and statute, assuring management’s responsibility to the retirement fund, and to facilitate the timely preparation of financial statements in accordance with accounting principles generally accepted in the United States of America.

**Additions and Deductions**

The monies necessary to finance the payment of retirement benefits are accumulated through investment earnings on the ASRS’ assets and employer and employee contributions. The primary expenses of the ASRS are the payment of retirement and disability benefits to beneficiaries, the refund of contributions to former members and the cost of administering the ASRS.

The following table shows the principal ASRS revenues and expenses for fiscal years 1999 and 2000, in millions of dollars:

	Fiscal Year 2000	Fiscal Year 1999	Change	Percentage Change
Revenue Type:				
Employee contributions	\$ 153	\$ 179	\$ (26)	(14.5)%
Employer contributions	153	179	(26)	(14.5)%
Member reimbursements	35	46	(11)	(23.9)%
Investments and other income	<u>2,122</u>	<u>2,914</u>	<u>(792)</u>	<u>(27.2)%</u>
Total	<u>\$2,463</u>	<u>\$3,318</u>	<u>\$ (855)</u>	<u>(25.8)%</u>

	Fiscal Year 2000	Fiscal Year 1999	Change	Percentage Change
Deductions Type:				
Benefits	\$ 788	\$ 714	\$ 74	10.4 %
Refunds	71	26	45	173.1 %
Investment management fees	21	18	3	16.7 %
Security loan	60	42	18	42.9 %
Administration	13	12	1	8.3 %
Other	<u>12</u>	<u>10</u>	<u>2</u>	<u>20.0 %</u>
Total	<u>\$ 965</u>	<u>\$ 822</u>	<u>\$ 143</u>	<u>17.4 %</u>

The employee and employer retirement contribution rates were reduced from 2.85 percent in fiscal 1999 to 2.17 percent in fiscal 2000 and, although the active memberships increased from 173,368 in fiscal 1999 to 183,924 in fiscal 2000 (an increase of 6.2 percent), the net effect was a reduction in the employee and employer retirement contributions of 14.5 percent.

Member reimbursement contributions were reduced by 23.9 percent since the inception of the current service purchase program which began on July 1, 1998.

For the year ended June 30, 1999, the ASRS achieved a market value rate of return on the total fund of 16.8 percent, whereas the return for the year ended June 30, 2000 was 10.0 percent. This decline in market value rate of return was primarily caused by the significantly lower rates of return on U.S. equities over this period, as demonstrated below:

	One-Year Periods Ended June 30,	
	2000	1999
EAFE Gross	7.9 %	17.4 %
Lehm Agg	3.1 %	4.6 %
S&P 500	22.8 %	13.2 %

For the 2000 fiscal year, the administrative expenses of the ASRS were controlled through two primary mechanisms. The general operating budget was appropriated by the Legislature, and the Board approved certain statutorily prescribed expenses (including investment expenses and long-term disability administrative costs).

### Funding Status

A statutory change effective in 1998 requires that an actuarial valuation be performed only following even-numbered years, rather than annually. This biennial valuation recommends contribution rates for a two-year period. Valuations are prepared annually as of June 30 of each year, the last day of the Plan's plan year and ASRS' fiscal year.

Any excess of additions over deductions is accumulated by the ASRS in order to meet future benefit obligations when due. According to the actuarial valuation as of June 30, 1999, the actuarial present value of the assets of the ASRS was \$18.761 billion. (This value includes an asset valuation method

upward adjustment of \$118.8 million from the book value of the assets.) This figure corresponds to the calculated actuarial accrued liabilities of \$16.122 billion. Thus, the asset side of the actuarial

balance sheet exceeds the amount of the actuarial liabilities by \$2.639 billion. A detailed discussion of funding is provided in the Actuarial Section of this report. Funding status and progress for the ASRS based on the most current valuation is presented in the required supplementary information, Schedule of Funding Progress, on page 30.

### **ASRS Funds**

As of June 30, 2000, the fair value of the ASRS funds (includes retirement, health benefits, and long-term disability funds) was \$23.9 billion. According to statutory restrictions, no more than 80 percent of the fund may be allocated to domestic and international equity securities. No more than 20 percent of the fund may be allocated solely to international equity securities.

During the fiscal year ended June 30, 2000, the ASRS funds remained broadly diversified with investments in domestic and international equities, domestic fixed income, and cash equivalent securities.

As of June 30, 2000, the ASRS funds consisted of 54.4 percent domestic equity securities, 29.5 percent domestic fixed income securities including mortgages and short-term investments, and 16.1 percent international equity securities.

### **Internal Control**

System internal accounting controls are designed to provide reasonable assurance regarding the safekeeping of assets and the reliability of financial records. Control procedures and responsibilities are documented and are reviewed periodically.

The Audit Committee, a committee appointed by the Board, monitors operations and controls throughout the year. The ASRS is audited annually by the independent accounting firm of Deloitte & Touche LLP.

During the fiscal year 1999-2000, the ASRS funds returned 10 percent. The combined fixed income investments returned 4.4 percent versus the Lehman Brothers Aggregate Bond Index of 4.6 percent. The domestic equity securities returned 7.5 percent matching the 7.3 percent return for the Standard & Poor's 500 Equity Index. The international equity investments returned 28.2 percent versus 17.4 percent for the Morgan Stanley Capital International Europe, Australia, and Far East Gross Index.

The fiscal year actuarial valuation indicates that the ASRS is well funded and fully capable of meeting all present and projected expenditure requirements.

### **Other Information**

An independent accounting firm audited the financial statements contained in this CAFR. The auditors' report for this year is unqualified, which is the best designation attainable. It means that in the opinion of our independent auditor, our financial statements present fairly, in all material respects, the financial position of the ASRS for the period under audit and the results of its operations for that period are in conformity with accounting principles generally accepted in the United States of America.

November 22, 2000  
Mr. James A. Jenkins  
Page Seven

The GFOA awards the highest recognition achievable for financial reporting for state and local governments. The ASRS has received the GFOA Certificate of Achievement for Excellence in Financial Reporting in each of the last 12 years. We believe that this year's report also conforms to the requirements for the certificate and we will, therefore, be submitting it to the GFOA for consideration.

This report reflects the efforts of the many dedicated ASRS employees under the direction of the ASRS Board. It is intended to provide complete and reliable information for decision making, to insure compliance with legal requirements, and is a means of measuring the responsible stewardship of the assets of the ASRS.

I would like to express my gratitude to my staff, the ASRS Board and the many other individuals who have been instrumental in maintaining the quality of service and performance which has become the standard for the ASRS.

Respectfully submitted,

LeRoy Gilbertson  
Director

The Government Finance Officers Association of the United States and Canada (“GFOA”) awarded a Certificate of Achievement for Excellence in Financial Reporting to Arizona State Retirement System for its comprehensive annual financial report for the fiscal year ended June 30, 1999. This was the 12<sup>th</sup> consecutive year that the government has achieved this prestigious award. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both accounting principles generally accepted in the United States of America and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe that our current comprehensive annual financial report continues to meet the Certificate of Achievement Program’s requirements and we are submitting it to the GFOA to determine its eligibility for another certificate.

# ARIZONA STATE RETIREMENT SYSTEM

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## ADMINISTRATIVE ORGANIZATION

### RETIREMENT BOARD MEMBERS

James A. Jenkins, Chairman, Local Government, Scottsdale (Member since June 1995)  
Chuck Essigs, Vice Chairman, Educator, Mesa (Member since May 1995)  
James Bruner, Public, Scottsdale (Member since January 1998)  
Merlin K. DuVal, Retirees, Phoenix (Member since January 1993)  
Bonnie Gonzalez, State Employees, Flagstaff (Member since March 2000)  
Alan Maguire, At-Large, Phoenix (Member since January 1998)  
Norman Miller, Public, Phoenix (Member since March 1998)  
Karl L. Polen, Jr., Public, Sun Lakes (Member since May 1995)  
Ray Rottas, Public, Paradise Valley (Member since July 1993)

### EXECUTIVE STAFF

LeRoy Gilbertson, Director  
Anthony Guarino, Deputy Director – Chief Operations Officer  
Paul Matson, Chief Investment Officer  
Tom Augherton, Deputy Director – External Operations

### SENIOR STAFF

Richard Beissel, Assistant Director – Administrative Services  
Donna Buelow, Assistant Director – Member Services  
Bernard Glick, Internal Auditor  
Kent Smith, Assistant Director – Information Services  
Fred Stork, Legal Counsel

### PROFESSIONAL CONSULTANTS

#### Actuary

Watson Wyatt Worldwide, Dallas, TX

#### Benefits

Fortis Benefits Insurance Co., Kansas City, MO  
Buck Consultants, Chicago, IL

#### Custodial Bank

Mellon Trust, Pittsburgh, PA

#### Independent Auditors

Deloitte & Touche LLP, Phoenix, AZ

#### Investment Advisors

Callan Associates, Inc., San Francisco, CA  
William M. Mercer Asset Planning, Inc., Los Angeles, CA

# ARIZONA STATE RETIREMENT SYSTEM

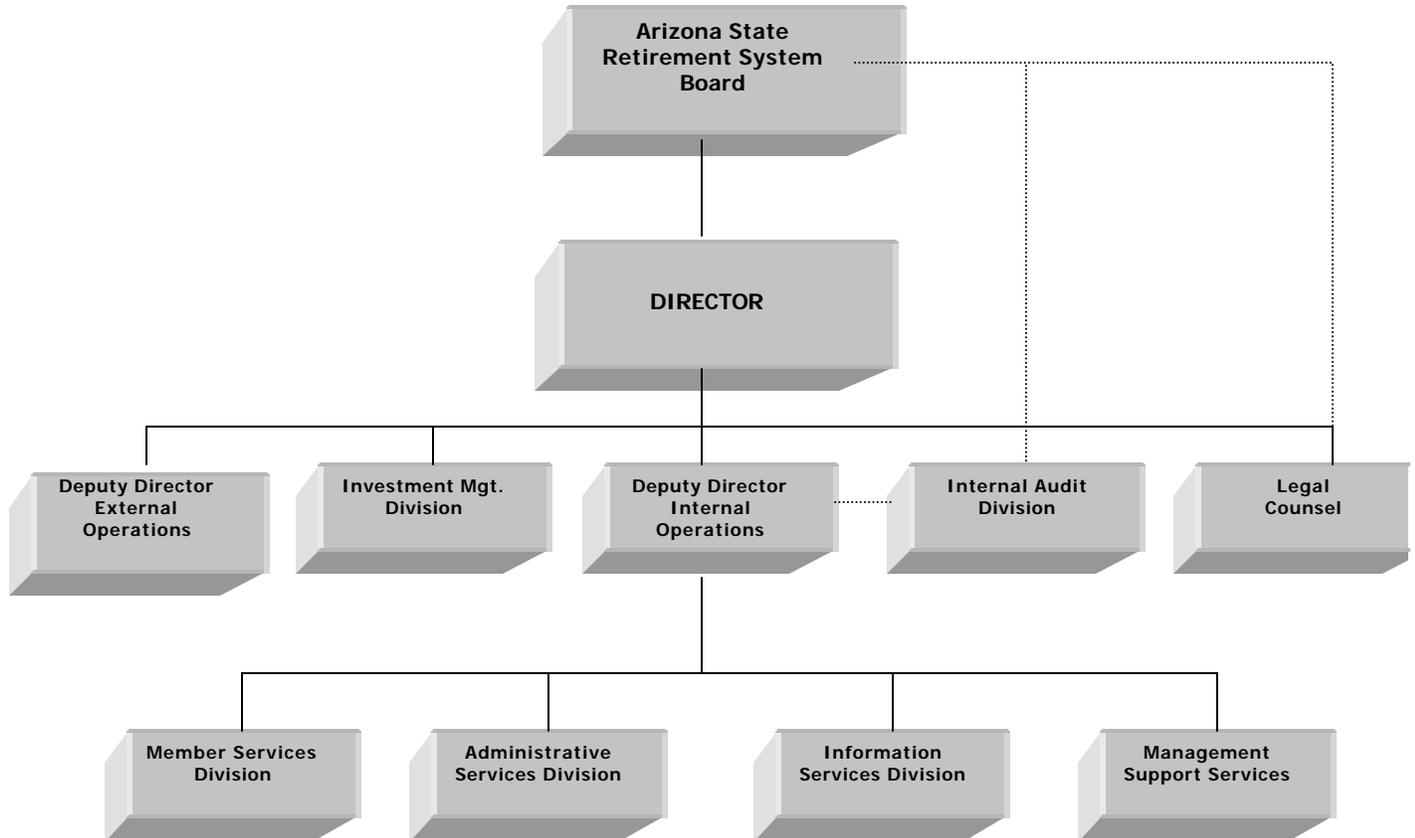
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## **Investment Managers**

Axe-Houghton Associates, Inc., Rye Brook, NY  
Bank of Ireland Asset Management U.S. Ltd., Santa Monica, CA  
Bank One, Arizona, NA, Phoenix, AZ  
BGI Barclays Global Investors, San Francisco, CA  
Blackrock Financial Management, New York, NY  
Brandes Investment Partners, L.P., San Diego, CA  
Brandywine Asset Management, Wilmington, DE  
Capital Guardian Trust Co., Los Angeles, CA  
Conseco Capital Management, Inc., Carmel, IN  
Dimension Fund Advisors, Santa Monica, CA  
J.P. Morgan Investment Management, Inc., New York, NY  
Mellon Capital Management Corp., San Francisco, CA  
Mellon Equity Associates, Pittsburgh, PA  
Phoenix Investment Partners (formerly Duff & Phelps), Chicago, IL  
State Street Global Advisors, Boston, MA  
Valley Ventures, L.P., Scottsdale, AZ  
Western Asset Management Company, Pasadena, CA

# Arizona State Retirement System

## Organizational Chart





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# ARIZONA STATE RETIREMENT SYSTEM

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## SUMMARY OF 2000 RETIREMENT LEGISLATION

*The second Regular Session of the 44<sup>th</sup> Legislature considered 30 bills and amendments affecting the state's retirement systems. Four of the 18 bills that directly related to the benefit programs and operations of the Arizona State Retirement System ("ASRS") passed the Legislature and were signed by the Governor.*

Chapter 66, HB 2238 (ASRS; benefit increases)

Effective July 18, 2000, removes the requirement that a member be 55 years of age to qualify for a permanent benefit increase ("PBI," also called a COLA). To be eligible to receive the PBI, a member must have been receiving benefits by July 31 of the previous year rather than the previous June 30. It also allows beneficiaries to receive the PBI after the death of the member if either had been receiving benefits before July 31 of the previous year.

Chapter 132, SB 1463 (retired teachers; return to work)

Allows a retired member who has attained a normal retirement age and who terminated employment for at least 12 months to return to work as a certificated teacher without suspension of his or her retirement benefit. The provisions do not apply to administrator or psychologist positions. Under this provision, the retired member is not eligible to participate in the LTD program or to accrue additional retirement benefits. This provision is repealed on June 30, 2003.

Provides for the biennial establishment of the LTD contribution rate to coincide with the setting of the retirement contribution rate.

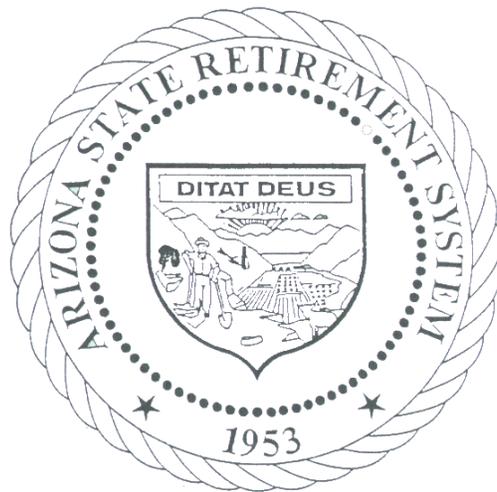
Chapter 315, SB 1384 (ASRS; Burke litigation settlement)

Makes technical changes to conform with the Internal Revenue Service approval of the Burke settlement.

Chapter 341, HB 2079 (ASRS; actuarial computation; study committee)

Creates a 12-member interim study committee to examine and compare actuarial computation methods that may be appropriate for the ASRS, including the entry age normal ("EAN") cost method and the projected unit credit ("PUC") method. The committee shall submit a written report on or before December 1, 2000 to the Speaker of the House of Representatives, the President of the Senate, the Governor, the Secretary of State and the Director of the Department of Library, Archives and Public Records. The bill is repealed as of December 31, 2000.

# FINANCIAL SECTION



# THE ARIZONA STATE RETIREMENT SYSTEM COMPREHENSIVE ANNUAL FINANCIAL REPORT

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## INDEPENDENT AUDITORS' REPORT

Arizona State Retirement System Board  
Auditor General of the State of Arizona  
Phoenix, Arizona

We have audited the accompanying combined financial statements of the Arizona State Retirement System ("ASRS") as of June 30, 2000 and for the year then ended, listed in the foregoing table of contents. These financial statements are the responsibility of the management of the ASRS. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, such combined financial statements present fairly, in all material respects, the financial position of the ASRS as of June 30, 2000, and the changes in its financial position for the year then ended in conformity with accounting principles generally accepted in the United States of America.

Our audit was conducted for the purpose of forming an opinion on the combined financial statements taken as a whole. The accompanying information and schedules as listed in the Financial Section Table of Contents is presented for the purpose of additional analysis, and is not a required part of the combined financial statements. This information and schedules are also the responsibility of the management of ASRS. Such additional information and schedules have been subjected to the auditing procedures applied in our audit of the combined financial statements and, in our opinion, is fairly stated in all material respects when considered in relation to the combined financial statements taken as a whole.

The Introductory Section, Investment Section, Actuarial Section and Statistical Section and listed in the foregoing table of contents are also presented for purposes of additional analysis and are not a required part of the combined financial statements. Such additional information has not been subjected to the auditing procedures applied in our audit of the combined financial statements and, accordingly, we express no opinion on it.

In accordance with Government Auditing Standards, we have also issued our report dated November 22, 2000 on our consideration of the ASRS' internal control over financial reporting. That report is an integral part of an audit performed in accordance with Government Auditing Standards and should be read in conjunction with this report in considering the results of our audit.

November 22, 2000

# ARIZONA STATE RETIREMENT SYSTEM

## COMBINED STATEMENTS OF PLAN NET ASSETS JUNE 30, 2000 WITH COMPARATIVE TOTALS FOR 1999

	Retirement	Health Benefit Supplement (Note 8)	Long-Term Disability (Note 8)	Combined June 30,	
				2000	1999
<b>ASSETS</b>					
Cash (Note 3)	\$ 84,753,180	\$ 504,878	\$ 3,414,892	\$ 88,672,950	\$ 3,066,500
<b>RECEIVABLES:</b>					
Accrued interest and dividends	61,048,284	2,402,711	30,823	63,481,818	54,930,685
Securities sold (Note 3)	100,124,331	3,940,648		104,064,979	100,374,689
Forward contract receivable	48,796,770	1,920,521		50,717,291	102,995,169
Contributions (Note 7)	10,510,137	1,125,820	1,199,251	12,835,208	7,978,176
Due from other funds	10,179,413			10,179,413	
Miscellaneous receivables	<u>1,645,884</u>	<u>64,778</u>		<u>1,710,662</u>	<u>759,423</u>
Total receivables	<u>232,304,819</u>	<u>9,454,478</u>	<u>1,230,074</u>	<u>242,989,371</u>	<u>267,038,142</u>
<b>INVESTMENTS AT FAIR VALUE (Note 3):</b>					
Temporary investments	1,763,274,304	64,836,220	4,114,968	1,832,225,492	1,630,729,096
U.S. government obligations	3,662,262,075	144,137,642	17,279,449	3,823,679,166	3,485,835,901
Corporate bonds	2,409,731,534	94,841,115	11,443,182	2,516,015,831	2,542,858,961
Common and preferred stocks	16,280,884,986	640,775,651	60,571,271	16,982,231,908	15,741,070,594
Valley Ventures	23,350	919		24,269	76,018
Real estate mortgages and contracts	224,265,626	8,826,544		233,092,170	257,275,358
Total investments	<u>24,340,441,875</u>	<u>953,418,091</u>	<u>93,408,870</u>	<u>25,387,268,836</u>	<u>23,657,845,928</u>
<b>TOTAL ASSETS</b>	<u>24,657,499,874</u>	<u>963,377,447</u>	<u>98,053,836</u>	<u>25,718,931,157</u>	<u>23,927,950,570</u>
<b>LIABILITIES:</b>					
Payable for securities purchased (Note 3)	415,845,357	16,366,652		432,212,009	376,542,690
Payable for securities lending collateral (Notes 3 and 4)	1,250,276,851	49,207,826		1,299,484,677	1,017,743,565
Forward contracts payable	48,839,217	1,922,192		50,761,409	102,150,525
Due to other funds			10,179,413	10,179,413	
Other	475,081	18,699	194,661	688,441	4,432,126
Total liabilities	<u>1,715,436,506</u>	<u>67,515,369</u>	<u>10,374,074</u>	<u>1,793,325,949</u>	<u>1,500,868,906</u>
<b>NET ASSETS HELD IN TRUST FOR PENSION BENEFITS</b>	<u>\$22,942,063,368</u>	<u>\$895,862,078</u>	<u>\$87,679,762</u>	<u>\$23,925,605,208</u>	<u>\$22,427,081,664</u>

(A Schedule of Funding Progress is presented on page 32)

The accompanying notes are an integral part of these statements.

# ARIZONA STATE RETIREMENT SYSTEM

## COMBINED STATEMENTS OF CHANGES IN PLAN NET ASSETS

YEAR ENDED JUNE 30, 2000 WITH COMPARATIVE TOTALS FOR THE YEAR ENDED JUNE 30, 1999

	Retirement	Health Benefit Supplement (Note 8)	Long-Term Disability (Note 8)	Combined June 30,	
				2000	1999
<b>ADDITIONS:</b>					
Contributions:					
Member contributions (Note 7)	\$ 124,930,657		\$ 28,027,181	\$ 152,957,838	\$ 179,086,642
Employer contributions (Note 7)	72,256,453	\$ 52,673,815	28,027,181	152,957,449	179,086,635
Member reimbursements	<u>35,347,830</u>			<u>35,347,830</u>	<u>46,170,568</u>
Total contributions	<u>232,534,940</u>	<u>52,673,815</u>	<u>56,054,362</u>	<u>341,263,117</u>	<u>404,343,845</u>
Investment income:					
Fair value appreciation (depreciation)	1,567,737,126	59,141,974	(1,283,863)	1,625,595,237	2,474,779,276
Interest	225,274,455	8,498,348	2,636,186	236,408,989	223,901,314
Dividends	154,265,288	5,819,569	4,140,641	164,225,498	154,223,325
Securities lending program (Note 3)	65,072,663	2,454,829		67,527,492	47,293,201
Real estate	6,602,787	249,086		6,851,873	8,431,997
Other	<u>21,492,095</u>	<u>142,605</u>		<u>21,634,700</u>	<u>5,578,876</u>
Total investment income	<u>2,040,444,414</u>	<u>76,306,411</u>	<u>5,492,964</u>	<u>2,122,243,789</u>	<u>2,914,207,989</u>
Less investment expenses:					
Investment management fees and monitor services	20,399,452	769,557		21,169,009	17,529,794
Securities lending interest expense (Note 3)	58,260,466	2,197,842		60,458,308	41,781,658
Real estate	<u>5,111,634</u>	<u>192,833</u>		<u>5,304,467</u>	<u>6,575,200</u>
Total investment expenses	<u>83,771,552</u>	<u>3,160,232</u>		<u>86,931,784</u>	<u>65,886,652</u>
Net investment income	<u>1,956,672,862</u>	<u>73,146,179</u>	<u>5,492,964</u>	<u>2,035,312,005</u>	<u>2,848,321,337</u>
Total additions	2,189,207,802	125,819,994	61,547,326	2,376,575,122	3,252,665,182
<b>DEDUCTIONS:</b>					
Retirement and disability benefits	695,425,997	37,651,498	41,220,030	774,297,525	702,386,261
Death benefits	13,255,861			13,255,861	11,484,518
Refunds to withdrawing members, including interest	70,754,497			70,754,497	26,108,152
Administrative expenses	11,107,600		1,954,333	13,061,933	12,233,562
Transfer to other retirement systems	4,881,748			4,881,748	1,008,726
Other	<u>1,734,577</u>	<u>65,437</u>		<u>1,800,014</u>	<u>2,110,385</u>
Total deductions	<u>797,160,280</u>	<u>37,716,935</u>	<u>43,174,363</u>	<u>878,051,578</u>	<u>755,331,604</u>
NET INCREASE	1,392,047,522	88,103,059	18,372,963	1,498,523,544	2,497,333,578
NET ASSETS HELD IN TRUST FOR PENSION BENEFITS – Beginning of year					
	<u>21,550,015,846</u>	<u>807,759,019</u>	<u>69,306,799</u>	<u>22,427,081,664</u>	<u>19,929,748,086</u>
NET ASSETS HELD IN TRUST FOR PENSION BENEFITS – End of year					
	<u>\$22,942,063,368</u>	<u>\$895,862,078</u>	<u>\$87,679,762</u>	<u>\$23,925,605,208</u>	<u>\$22,427,081,664</u>

The accompanying notes are an integral part of these statements.

# ARIZONA STATE RETIREMENT SYSTEM

## NOTES TO FINANCIAL STATEMENTS YEAR ENDED JUNE 30, 2000

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### 1. DESCRIPTION OF THE SYSTEM

#### *Organization*

The Arizona State Retirement System (“ASRS”) is a component unit of the State of Arizona. The ASRS is a cost-sharing, multiple-employer, public employee retirement system established by the State of Arizona to provide pension benefits for employees of the State and employees of participating political subdivisions and school districts. The ASRS is administered in accordance with Title 38, Chapter 5 of the Arizona Revised Statutes (“A.R.S.”).

The ASRS administers the Arizona State Retirement System and the Arizona State Retirement Plan (the “Plan”). The Arizona State Retirement System was established by the Arizona Legislature in 1953 to provide retirement and other benefits for state employees and teachers, together with employees of political subdivisions that elected coverage. In 1943, the Legislature had established the Arizona Teachers’ Retirement System (the “Teachers’ System”) to provide benefits for teachers. After the establishment of the Arizona State Retirement System, teachers who were, or later became, eligible through employment to be covered by the Arizona State Retirement System were transferred to the Plan. The Teachers’ System then became inactive, except for continuation of retirement benefits already being paid and obligations to teacher members who did not become eligible for the Arizona State Retirement System.

The Plan, enacted by the Legislature in 1970, became effective July 1, 1971. Effective July 1, 1981, all nonretired members of the Arizona State Retirement System became members of the Arizona State Retirement Plan as prescribed by Laws of 1980, Chapter 238.

A.R.S. 38-783 and A.R.S. 38-797 require separate accounts be established for health insurance premium benefits and long-term disability benefits, respectively. Effective July 1, 1995, the Arizona State Retirement System has established an account for each benefit program and has reported those funds in the combined financial statements.

#### *Reporting Entity*

The financial statements of the ASRS include the financial activities of all the above funds. A Retirement Board (the “Board”), appointed by the Governor and confirmed by the Arizona State Senate, manages the ASRS.

After first obtaining Federal Social Security coverage for its employees, an employer may then elect to cover its employees under the ASRS. Once retirement coverage is obtained, all employees who qualify as participants, with the exception of those eligible for other state retirement programs, are required to become contributing members of the Arizona State Retirement Plan.

# ARIZONA STATE RETIREMENT SYSTEM

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## *Contributions*

Participating employers and their employees contribute percentages of their salaries for retirement annuities and survivor annuities in accordance with Arizona Revised Statutes. The laws of 1998, Chapter 238, are applicable for the plan year beginning July 1, 1998. Contributions are excluded from gross income for federal and state income tax purposes. Contributions are collected by employers and remitted to the Plan. Contributions earn interest at the rate of 8 percent per annum.

The ASRS laws allow the purchase of eligible service credit for which no benefit could be paid by another qualified plan. Purchasable services include active duty military service, other qualified plan service and refunded service.

At June 30, 2000 and 1999, the number of participating employers and employees totaled:

	2000	1999
EMPLOYER UNITS:		
School districts	220	221
Charter schools	100	79
Cities and Towns	62	62
Counties	14	14
Special districts	48	41
Community college districts	10	10
State government	<u>1</u>	<u>1</u>
Total	<u>455</u>	<u>428</u>
EMPLOYEE MEMBERS:**		
Retirees (including beneficiaries)	58,038	55,104
Terminated Employees entitled to future benefits	85,825	69,912
Long-term disability recipients	3,681	3,680
CURRENT EMPLOYEES:		
Fully vested*	<u>183,924</u>	<u>176,368</u>
TOTAL	<u>331,468</u>	<u>305,064</u>

\* Plan members are deemed fully vested when retirement contributions are made. The fully vested members are currently contributing.

\*\* 1999 data updated from 1999 actuarial valuation data

## *Benefits*

The Arizona State Retirement Plan provides benefits under formulas and provisions described in the law. Benefits and Administrative expenses are paid from funds contributed by members and employers and from earnings on the invested funds.

# ARIZONA STATE RETIREMENT SYSTEM

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The Plan provides for retirement, disability, health insurance premium benefits, and death and survivor benefits.

Retirement benefits are calculated on the basis of age, average monthly compensation, and service credit, which is established on a fiscal year basis (July 1 to June 30). Members are eligible for full retirement benefits on (A) their 65th birthday, (B) their 62nd birthday and completion of at least ten years of credited service, or (C) the first day that the sum of their age plus total credited service equals 80. The benefit is based on a percentage of average monthly compensation (2 percent through June 30, 2000; 2.1 percent effective July 1, 2000) multiplied by the years of service credit. Average monthly compensation is defined as the period of 36 consecutive months during which a participant receives the highest compensation within the last 120 months of service during which the employee made retirement contributions as required by law. The compensation does not include lump sum payments on termination of employment for accumulated vacation or annual leave, sick leave, compensatory time or any other form of termination pay. Members who began participation in the Plan prior to January 1, 1984, may choose to have average monthly compensation determined upon the period of 60 consecutive months during which the member receives the highest compensation within the last 120 months of service, including lump sum payments as described above. Persons who attain age 50 with at least five years of total credited service may take an early retirement, which entitles them to a reduced retirement benefit.

Effective July 1, 1988, members of the Plan are eligible for a long-term disability benefit in the event they become unable to perform their work. The monthly benefit is equal to 66-2/3 percent of the monthly rate of compensation. A participant continues to earn service credit not to exceed 30 years of service credit during the period of disability.

The Retiree Group Insurance Program offers health insurance coverage for retired and disabled members who are no longer eligible for coverage administered by their former member employers. Commencing January 1, 1989, retired and disabled members of the ASRS and Plan became eligible for a health insurance premium subsidy benefit. A detailed explanation of both programs is presented in the additional benefits section (Note 8).

## ***Termination***

Upon termination of employment, member contributions made to the Plan, plus accrued interest at 8 percent compounded monthly per annum, are refundable. Effective August 6, 1999 members may be eligible to receive a percentage of employer contributions to the plan based on years of service prorated as follows:

- 5 to 5.9 years of service receives 25 percent of employer contributions
- 6 to 6.9 years of service receives 40 percent of employer contributions
- 7 to 7.9 years of service receives 55 percent of employer contributions
- 8 to 8.9 years of service receives 70 percent of employer contributions
- 9 to 9.9 years of service receives 85 percent of employer contributions

# ARIZONA STATE RETIREMENT SYSTEM

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- 10 or more years of service receives 100 percent of employer contributions

Withdrawal of such accumulated contributions results in forfeiture of the member's accrued benefits in the Plan; however, state law provides for reinstatement of a member's forfeited service upon repayment of the accumulated contributions plus interest if a former member returns to covered service.

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

- a. *Basis of Accounting* – The financial statements are prepared using the accrual basis of accounting under which expenses are recorded when the liability is incurred and revenues are recorded in the accounting period in which they are earned and become measurable. Employee contributions are recognized in the period in which contributions are due. Employer contributions are recognized when due and the employer has made a formal commitment to provide the contributions. Contributions from employees and employers for service through June 30 are accrued. These contributions are considered to be fully collectible and, accordingly, no allowance for uncollectible receivables is reflected in the financial statements.

Investment income is recognized when earned and benefit payments and refunds and other expenditures are recorded when incurred.

- b. *Investments* – Investments include U.S. Government and government agency obligations, real estate, commercial mortgages, corporate bonds and equity obligations. Investments are reported at fair value.

Security transactions and any resulting gains or losses are accounted for on a trade date basis.

Investments other than real estate and commercial mortgages are reported at fair values determined by the custodial agents. The agent's determination of fair values includes, among other things, using pricing services or prices quoted by independent brokers at current exchange rates.

Commercial mortgages have been valued on an amortized cost basis, which approximates fair value. No allowance for loan loss has been provided as all loans are considered by management to be fully collectible. Short-term investments are reported at cost, which approximates fair value. For investments where no readily ascertainable fair value exists, management, in consultation with their investment advisors, has determined the fair values for the individual investments based on anticipated maturity dates and current interest rates commensurate with the investment's degree of risk.

Net investment income includes net appreciation in the fair value of investments, interest income, dividend income and total investment expense, which includes investment management and custodial fees and all other significant investment related costs.

- c. *Fixed Assets* – The ASRS does not record property and equipment (principally office furniture and fixtures) as assets, but includes the cost of such items in administrative expenditures in the year purchased due to the insignificant total cost.

# ARIZONA STATE RETIREMENT SYSTEM

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- d. *Federal Income Tax Status* – During the year ended June 30, 2000, the ASRS qualified under Section 401(a) of the Internal Revenue Code (IRC) and was exempt from federal income taxes under Section 501(a) of the IRC.
- e. *Use of Estimates* -The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.
- f. *Comparative Data* – The accompanying financial statements include certain prior-year summarized comparative information in total but not by net asset class. Such information does not include sufficient detail to constitute a presentation in conformity with accounting principles generally accepted in the United States of America. Accordingly, such information should be read in conjunction with the ASRS’ financial statements for the year ended June 30, 1999, from which the summarized information was derived. Certain prior year data have been reclassified to conform with current year presentation.

### 3. CASH AND INVESTMENTS

#### *Cash*

At June 30, 2000 and 1999, the carrying amount of the ASRS’ cash deposits with financial institutions was \$88,672,950 and \$3,066,500, respectively, and the bank balance was \$2,707,043 and \$1,861,985, respectively. Of the bank balances for the years ended June 30, 2000 and 1999, \$100,000 was covered with federal depository insurance funds and \$2,607,043 and \$1,761,985, respectively, were collateralized with securities held by the pledging bank’s trust department in the ASRS’ name.

#### *Investments*

Statutes enacted by the Arizona State Legislature (the “Statutes”) authorize the ASRS to make investments in accordance with the “Prudent Expert” rule. Section A.R.S. 38-719 (B) of the Arizona Revised Statutes interprets the rule to be that Investment Management shall discharge the duties of their position with the care, skill, prudence and diligence, under the circumstances then prevailing, that a prudent person acting in a like capacity and familiar with the same matters would use in conduct of an enterprise of a like character and with like aims as that of the system, subject to certain statutory limitations and restrictions. Within this broad framework, the ASRS has chosen to invest in short-term securities, obligations of the United States Government or agencies of the United States Government, corporate bonds, common and preferred stocks (Domestic and Foreign) and mortgages.

# ARIZONA STATE RETIREMENT SYSTEM

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The Statutes place the following restrictions on the ASRS' investment fund portfolio:

1. No more than 80 percent of the ASRS' total assets may be invested at any given time in corporate stocks or equity equivalents, based on cost value of the stocks or equity equivalents irrespective of capital appreciation.
2. No more than 5 percent of the ASRS' assets may be invested in securities issued by any one institution, agency or corporation, other than securities issued as direct obligations of or fully guaranteed by the United States Government.
3. No more than 5 percent of the voting stock of any one corporation may be owned.
4. No more than 20 percent of the ASRS' assets (based on cost value of the total fund) may be invested in foreign securities, and those investments shall be made only by investment managers with demonstrated expertise in such investments.
5. No more than 10 percent of the ASRS' assets may be invested in bonds or other evidences of indebtedness of those multinational development banks in which the United States is a member nation, including the International Bank for Reconstruction and Development, the African Development Bank, the Asian Development Bank, and the Inter-American Development Bank.
6. No more than 1 percent of the ASRS' assets may be invested in Economic Development Projects authorized as eligible for such investment by the Arizona State Department of Commerce.

The ASRS is responsible for the investment of temporary surplus funds which, by statute, can be invested only in obligations of the United States Government, agencies whose obligations are guaranteed by the United States Government and commercial paper or bankers' acceptances for a term not to exceed fifteen days.

GASB No. 3 requires government entities to categorize investments for the purpose of giving an indication of the level of credit risk assumed by the entity at year-end. The following table presents the investments at June 30, 2000, categorized to give an indication of the level of risk assumed by ASRS. The categories are:

1. Insured or registered investments, or securities held by ASRS or its agent in the ASRS' name.
2. Uninsured or unregistered investments, with securities held by the counterparty's trust department or agent in ASRS' name.
3. Uninsured and unregistered investments, with securities held by the counterparty in ASRS' name or held by the counterparty's trust department or agent but not in ASRS' name.

Investments not evidenced by securities are not categorized.

# ARIZONA STATE RETIREMENT SYSTEM

The fair value of investments was as follows:

	2000		Fair Value	1999 Fair Value
	Category			
	1	2		
<b>Investments – Categorized</b>				
Preferred and Common Stock – Domestic	\$ 12,973,873,753		\$ 12,973,873,753	\$12,527,551,294
Preferred and Common Stock – Foreign		\$ 3,416,171,437	3,416,171,437	2,757,254,720
U. S. Government Obligations	3,145,514,823		3,145,514,823	2,946,853,237
Corporate Obligations – Domestic	2,454,204,488		2,454,204,488	2,492,902,239
Corporate Obligations – Foreign				46,046
Foreign Currency		2,718,399	2,718,399	9,214,502
	18,573,593,064	3,418,889,836	21,992,482,900	20,733,822,038
<b>Investments – Not Categorized</b>				
Short-Term Investments*			1,829,507,092	1,621,514,594
Mortgages			192,225,170	215,448,358
Real Estate			40,867,000	41,827,000
Investments held by Broker/Dealers under Security Loan Program:				
U. S. Government Obligations			678,164,343	538,982,664
Corporate Obligations – Domestic			61,835,612	49,986,694
Preferred and Common Stock – Domestic			141,585,633	65,242,816
Preferred and Common Stock – Foreign			450,601,086	391,021,764
TOTAL INVESTMENTS AT FAIR VALUE	18,573,593,064	3,418,889,836	25,387,268,836	23,657,845,928
Obligations Under Security Loans			(1,299,484,677)	(1,017,743,565)
INVESTMENTS AT FAIR VALUE – NET	<u>\$ 18,573,593,064</u>	<u>\$ 3,418,889,836</u>	<u>\$ 24,087,784,159</u>	<u>\$22,640,102,363</u>

\* Short-term Investments represent investable cash balances swept daily into the custodian bank's Short-Term Investment Fund which is comprised of various commercial paper and short-term government securities.

If available, quoted fair value prices have been used to value investments as of June 30, 2000 and 1999. Securities not having a quoted fair value have been valued on yields currently available on comparable securities of issuers with similar credit ratings. The fair value of investments in foreign securities totaled \$3,869,490,922 and \$3,157,537,032 at June 30, 2000 and 1999, respectively, and are included in common and preferred stocks, corporate obligations and convertible bonds. Net foreign securities and currency market appreciation are included in determining net increase for the years ended June 30, 2000 and 1999 and are \$820,723,009 and \$366,098,246, respectively.

# ARIZONA STATE RETIREMENT SYSTEM

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Due to the flow of securities to and from transfer agents and the security lending program, securities occasionally cannot be delivered for a sale or received for a purchase, resulting in a “failed” transaction. Securities with trade dates in June and settlement dates in July result in “outstanding” transactions. Since these securities have contractually changed ownership, receivables and payables result from these transactions. Such transactions resulted in a receivable for securities sold of \$104,064,979 and \$100,374,689 and a payable for securities purchased of \$432,212,009 and \$376,542,690 at June 30, 2000 and 1999, respectively.

## 4. SECURITIES LENDING PROGRAM

Arizona Revised Statutes allow the ASRS to participate in a securities lending program. The ASRS’ custody bank enters into agreements with counterparts to loan securities and have the same securities redelivered at a later date. The ASRS currently receives as collateral at least 102 percent of the market value of the loaned securities and maintains collateral at no less than 100 percent for the duration of the loan. At year-end, the ASRS has no credit risk exposure to borrowers because the amount the ASRS owes the borrowers exceeds the amount the borrowers owe the ASRS. During fiscal year 1998, statutes were amended to allow for other than cash collateral. The ASRS records the cash collateral received and the same amount as an obligation for securities on loan. Any cash collateral received is invested in short-term investments. The ASRS receives a negotiated fee for its loan activities. Investments made with cash collateral are classified as an asset on the Statements of Plan Net Assets. A corresponding liability is recorded as the ASRS must return the cash collateral to the borrower upon expiration of the loan. At June 30, 2000 and 1999, the ASRS had \$1,299,484,677 and \$1,017,743,565, respectively, outstanding as payable for securities on loan. The ASRS does not have the ability to pledge or sell collateral securities without borrower default. The maturities of the investments made with cash collateral match the maturities of securities on loan. There are no restrictions on the dollar amount of security loans that may be made by the ASRS. The ASRS is indemnified against gross negligence and borrower default by the lending agents.

## 5. DERIVATIVES

Derivatives are instruments (securities or contracts) whose value is dependent on such things as stock or bond prices, interest rate levels, or currency exchange rates. ASRS Managers use derivatives to hedge currency risk, reduce transaction costs, obtain market exposure, and enhance returns.

The principal categories of derivatives employed and their uses during the year were as follows:

<b>Category</b>	<b>Purpose</b>
Foreign exchange forward contracts	Hedge currency risk of investment denominated in foreign currencies.
Futures	Reduce transaction costs; obtain market exposure; enhance returns.
SWAPS	Interest rate risk management; enhance returns.

# ARIZONA STATE RETIREMENT SYSTEM

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Generally, derivatives are subject to both market risk and counterparty risk. The derivatives utilized by ASRS Managers typically have no greater market risk than their physical counterparts, and in many cases are offset by exposure elsewhere in the portfolio.

The ASRS believes that it is unlikely that any of the derivatives used by its Managers could have a material adverse effect on the financial conditions of the ASRS.

## **6. FUNDING STATUS AND PROGRESS**

Significant actuarial assumptions used include: (a) a rate of return on investment of present and future assets of 8 percent, compounded annually, (b) projected salary increases ranging from 4.50 percent to 9.50 percent per year, (c) rates of disability, (d) rates of withdrawal, (e) rates of retirement, (f) mortality rates – 1983 group annuity mortality table with setback of one year for males, (g) mortality rates after disability, (h) valuation of assets using market value less five-year phase-in of excess (shortfall) investment income, and (i) projected unit-credit funding method. For the current year, there were no changes in the actuarial funding or the actuarial assumptions and methods.

## **7. CONTRIBUTIONS REQUIRED AND CONTRIBUTIONS MADE**

The A.R.S. provide statutory authority for determining the employees' and employers' contribution amounts as a percentage of covered payrolls. Employers are required to contribute at the same rate as employees. Although the statutes prescribe the basis of making the actuarial calculation, the Arizona legislature is able to legislate a contribution rate other than the actuarially determined rate. The actuarial computation is made two years in advance based on the June 30 information (the rate for 2000 was based on June 30, 1998 information). The actuarial assumptions used in this measure are those adopted by the ASRS' Board on November 20, 1996. The contribution rates were actuarially determined using the Projected Unit Credit ("PUC") funding method, the use of which was established by legislative action in 1989. The employee and employer contribution rate is determined as one-half of the percent of pay needed to pay the normal cost of the Plan and a factor to amortize the under-funded past service liability based on the criteria of the Arizona Revised Statutes, not to exceed an amortization period of 30 years. This change is being phased-in over the next 14 years. Since the Plan is overfunded, the percent of pay needed to amortize the UAAL is negative.

# ARIZONA STATE RETIREMENT SYSTEM

The contribution rates, as actuarially determined, for the years ended June 30, 1999 and 1998 were as follows (the most recent actuarial information available was as of June 30, 1999):

	1999 Valuation (For the contribution period July 1, 2001 – June 30, 2003)		1998 Valuation (For the contribution period July 1, 1999 – June 30, 2001)	
	Amount	Percent of Covered Payroll	Amount	Percent of Covered Payroll
Normal cost	\$ 601,154,219	10.95%	\$ 514,810,520	10.47%
Amortization of over-funded past service liability	<u>(301,287,555)</u>	<u>(5.49)%</u>	<u>(316,561,025)</u>	<u>(6.13)%</u>
Total	<u>\$ 299,866,664</u>	<u>5.46 %</u>	<u>\$ 198,249,495</u>	<u>4.34 %</u>
Contributions made as a percentage of the current year covered payroll:				
Employers' share	\$ 179,086,642	2.73 %	\$ 176,768,738	2.17 %
Employees' share	<u>179,086,635</u>	<u>2.73 %</u>	<u>176,768,737</u>	<u>2.17 %</u>
Total	<u>\$ 358,173,277</u>	<u>5.46 %</u>	<u>\$ 353,537,475</u>	<u>4.34 %</u>

The statutory contribution rate for the year ended June 30, 2000 was 2.66 percent (2.17 percent retirement and .49 percent long-term disability) for both the employers' and employees' portion. This was determined by the 1998 actuarial valuation. The actuarially determined contribution rate for the year ended June 30, 1999 was 3.34 percent (2.85 percent retirement and .49 percent long-term disability) for both the employers' and employees' portion. This rate is applied to the covered payroll to determine the employee and employer contributions. GASB No. 25 defines covered payroll as all elements included in compensation paid to active employees on which contributions to a pension plan are based.

## 8. ADDITIONAL BENEFITS

In addition to the pension benefits described, the ASRS offers the Retiree Group Insurance Program and the Health Insurance Premium Benefit Program to eligible retired and disabled members. A retired member is defined as a member actively receiving an annuity benefit and a disabled member is defined as a member receiving a Long-Term Disability ("LTD") benefit through the LTD program administered by the ASRS or through their former member employer's group LTD plan.

Pursuant to A.R.S. 38-782, the Retiree Group Insurance Program makes available group health insurance coverage to eligible retired and disabled members and their dependents. Retired and disabled members of the ASRS, Public Safety Personnel Retirement System, Elected Officials Retirement Plan, and Corrections Officers Retirement Plan may participate if they are no longer eligible for health insurance benefits through their former employer. More than 38,000 coverage agreements currently exist for retired and disabled members and their dependents.

# ARIZONA STATE RETIREMENT SYSTEM

Pursuant to A.R.S. 38-783, retired and disabled members with at least five years of credited service are eligible to participate in the Health Insurance Premium Benefit (subsidy) Program. This assistance is provided to those members that elect group coverage through either the Retiree Group Insurance Program or their former member employer. The following chart illustrates the maximum amount of the monthly available benefit for eligible members and their dependents:

Years of Credited Service	Percent of Premium Benefit	Member – Not Medicare Eligible			Member – Medicare Eligible		
		Member Only NOT Medicare Eligible	With Dependent(s) NOT Medicare Eligible	With Dependent(s) Medicare Eligible	Member Only Medicare Eligible	With Dependent(s) NOT Medicare Eligible	With Dependent(s) Medicare Eligible
5.0-5.9	50 percent	\$47.50	\$ 87.50	\$ 72.50	\$32.50	\$ 72.50	\$ 57.50
6.0-6.9	60 percent	57.00	105.00	87.00	39.00	87.00	69.00
7.0-7.9	70 percent	66.50	122.50	101.50	45.50	101.50	80.50
8.0-8.9	80 percent	76.00	140.00	116.00	52.00	116.00	92.00
9.0-9.9	90 percent	85.50	157.50	130.50	58.50	130.50	103.50
10.0+	100 percent	95.00	175.00	145.00	65.00	145.00	115.00

The ASRS reimbursed approximately \$37.7 million and \$34.9 million towards the cost of group health insurance coverage for the years ended June 30, 2000 and 1999, respectively.

## 9. CONTINGENT LIABILITIES

On November 18, 1997, the Superior Court of Arizona entered a judgment against the ASRS in a suit brought by a retired member of the ASRS. The court has decided that the member is entitled to a pension that the ASRS shall calculate and pay without any decreases or limitations resulting from State statutes enacted between 1984 and 1996. Under a class action certification, the retired member represents a class of approximately 900 ASRS members (active, inactive and retired) whose retirement benefits the ASRS may have decreased or been limited under such legislation. The court-determined liability was approximately \$11.3 million. However, ASRS management believes the ultimate resolution of this matter will not have a significant adverse effect on the ASRS' financial position or results of operations.

The ASRS is also a party in various other litigation matters. While the final outcome cannot be determined at this time, management is of the opinion that the liability, if any, for these legal actions will not have a material adverse effect on the ASRS' financial position or results of operations.

## 10. REQUIRED SUPPLEMENTARY SCHEDULES

Historical trend information designed to provide information about the ASRS' progress made in accumulating sufficient assets to pay benefits when due is required supplementary information. Required supplementary information for the years available in accordance with the parameters of GASB 25 is included immediately following the notes to the financial statements.

# ARIZONA STATE RETIREMENT SYSTEM

## REQUIRED SUPPLEMENTAL INFORMATION TEN-YEAR COMPARISON

### Schedule of Funding Progress – Retirement Fund

Actuarial Valuation Date June 30	Actuarial Value of Assets a	Actuarial Liability (AAL) Projected Unit-Credit b	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a/b)	Covered Payroll c	UAAL as a Percentage of Covered Payroll [(b-a)/c]
1990	\$ 7,297	\$ 6,745	\$ (552)	108.2%	\$ 3,212	(17.2)%
1991	7,822	7,168	(654)	109.1%	3,453	(18.9)%
1992	8,842	8,210	(632)	107.7%	3,616	(17.5)%
1993	9,770	8,921	(849)	109.5%	3,748	(22.7)%
1994	10,540	9,668	(872)	109.0%	4,126	(21.1)%
1995	11,521	10,304	(1,217)	111.8%	4,432	(27.5)%
1996	12,579	11,111	(1,468)	113.2%	4,632	(31.7)%
1997	13,692	11,694	(1,998)	117.1%	4,836	(41.3)%
1998	15,577	12,910	(2,667)	120.7%	5,164	(51.6)%
1999	18,043	15,476	(2,567)	116.6%	5,488	(46.8)%

NOTE: Dollar amounts in millions. Values shown for valuation dates on or after June 30, 1996 are for the 401(a) pension plan only.

### Schedule of Employer Contributions

Year Ended June 30	Employer Contributions Required*	Percentage Contributed
1990	\$ 64,434,561	100 percent
1991	133,364,246	100 percent
1992	132,273,316	100 percent
1993	135,644,868	100 percent
1994	124,763,806	100 percent
1995	158,559,931	100 percent
1996	172,848,417	100 percent
1997	173,508,019	100 percent
1998	176,768,738	100 percent
1999	179,086,635	100 percent

\*Includes contributions for long-term disability.

Information is shown only for the years available in accordance with the parameters of GASB 25. Additional years will be added as data becomes available.

See notes to required supplementary information.

# ARIZONA STATE RETIREMENT SYSTEM

## NOTES TO REQUIRED SUPPLEMENTAL INFORMATION YEAR ENDED JUNE 30, 2000

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### 1. ACTUARIAL METHODS AND ASSUMPTIONS FOR VALUATIONS PERFORMED

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated.

The Project Unit Credit is the actuarial cost method used in the valuation for the period ended June 30, 1998. The amortization method used for the June 30, 1998 valuation was the Level Dollar method, 13 years grading to 30. This is a closed amortization period. A five-year smoothed market value method is used to determine the actuarial value of assets. The investment return rate used is 8 percent per year, compounded annually. The inflation rate assumption used is 4.25 percent per year. Projected salary increase assumptions are based on 4.50 percent to 9.50 percent per year. The cost-of-living adjustment reserve is \$705 million as of June 30, 1998.

#### *Significant Factors Affecting Identification of Trends – 1989*

##### *PUC Funding Method*

Beginning with the June 30, 1989 actuarial valuation of the total employee and employer contributions payable beginning July 1, 1990 shall be determined using the Projected Unit Credit (PUC) funding method replacing the Entry-Age-Normal method.

##### *\$12,000 Minimum Average Compensation for Current Retirees*

Recalculation of the retirement benefit for all plan members retired before June 30, 1989 who had 10 years of credit service using a minimum average compensation of one thousand dollars per month.

##### *2.0 percent Ad Hoc COLAs*

Effective July 1, 1989, all members retired on or before June 30, 1988 shall receive a 2.0 percent permanent benefit increase to their June 30, 1990 base benefit.

##### *Early Retirement Window*

During the period of May 15, 1989 through November 14, 1989, a member who is eligible Normal Retirement or Early Retirement with age plus credited service at least equal to 80, may retire and receive a benefit calculated using a 2.2 percent multiplier instead of 2.0 percent.

##### *3.0 percent Tax Equity Allowance*

Retroactive to the later of January 1, 1989 or the date payments commence, each member retiring on or before September 14, 1989 shall receive a tax equity benefit allowance consisting of a permanent increase of 3.0 percent in his or her January 1, 1989 base benefit.

# ARIZONA STATE RETIREMENT SYSTEM

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## *Significant Factors Affecting Identification of Trends – 1990*

### *Rule of 82*

Effective May 1, 1990, the number of points (sum of member's age and years of service) required to be eligible for normal retirement shall be reduced from 85 to 82. Also, the early retirement reduction factor for employees with 77 or more points but less than 82 points shall be 3 percent for each point or fraction thereof less than 82.

### *3.0 percent Tax Equity Allowance*

Each member who retires between September 15, 1989 and September 14, 1990 shall receive a tax equity benefit allowance consisting of a permanent increase of 3.0 percent in his or her base benefit, retroactive to the date of retirement.

### *Graded Vesting for Health Insurance Premium Supplement*

The Health Insurance Premium Supplement is extended to those qualifying members with between five and nine years of service. The member will be eligible to receive 10 percent of the benefit for each completed year of service (i.e., 50 percent to 90 percent).

## *Significant Factors Affecting Identification of Trends – 1991*

### *3.0 percent Tax Equity Allowance*

Each member who retires between September 15, 1990 and September 14, 1991 shall receive a tax equity benefit allowance consisting of a permanent increase of 3.0 percent in his or her base benefit, retroactive to the date of retirement.

### *Recalculation of Retiree Benefits Using 2.0 percent Benefit Multiplier*

Each retired member with at least 10 years of service who retired prior to June 30, 1985 shall have his or her benefit recomputed. The recomputed benefit shall be equal to 2 percent times final average earnings times credited service plus an additional \$2 for each year of service. The retired member will receive the larger of the recalculated benefit or his/her current benefit. This increase is effective October 1, 1991.

### *2.3 percent Ad Hoc Increase*

Effective July 1, 1991, all members retired on or before June 30, 1990 shall receive a 2.3 percent permanent benefit increase in their June 30, 1991 base benefit.

### *Rule of 80*

Effective July 1, 1992, the number of points (sum of member's age and years of service) required to be eligible for normal retirement shall be reduced from 82 to 80. (For continuation purposes, this legislation is not reflected until the 1993/94 fiscal year).

### *Pop-up Option*

A pop-up option is added for retiring members who first participate in the Plan on or after December 31, 1991.

# ARIZONA STATE RETIREMENT SYSTEM

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## *Significant Factors Affecting Identification of Trends – 1992*

### *3.0 percent Tax Equity Allowance*

Each member who retires between September 15, 1991 and September 14, 1992 shall receive a tax equity benefit allowance consisting of a permanent increase of 3.0 percent in his or her base benefit, retroactive to the date of retirement.

### *Minimum Retiree Benefit*

Each retiree of the Arizona State Retirement Plan who is at least age 75 on December 31, 1992 and who had at least ten years of service upon retirement from the Plan shall be eligible for a minimum benefit. If the eligible retiree had at least ten years of service but less than fifteen years, his minimum benefit is \$350 a month. If the eligible retiree had at least fifteen years of service but less than twenty, the retiree's minimum benefit is \$500. If the eligible retiree had at least twenty years of service the retiree's minimum benefit is \$600. The minimum benefit shall be compared to the retiree's current benefit (including all ad hoc increases).

### *5 percent Ad Hoc Increase*

Effective November 1, 1992, all members retired on or before October 31, 1992 shall receive a 5 percent permanent benefit increase in their October 31, 1992 benefit.

### *Forfeited Service Repurchase*

Any present active member who has previously forfeited service has until December 31, 1994, to repurchase the forfeited service by paying the plan the employee and employer contributions (accumulated with interest) which would have been contributed during the member's period of forfeited service.

### *Repurchase of Service Due to Reduction in Force*

Any currently active member who was terminated prior to December 31, 1992 as a result of a required reduction in force may purchase the credited service for the following period of unemployment if the member had five or more years of service at the time of termination and resumed employment with a participating employer within two years of termination. The cost of the repurchase is the total of the employee and employer contribution (accumulated with interest) which would have been contributed during the member's period of unemployment.

### *Change in Section 38-781.05 Funding Method*

Section 38-781.05 of the Plan was amended so that the funding period for the plan would continue to be the period between the valuation and June 30, 2002 as long as the plan has a negative Unfunded Actuarial Accrued Liability. If the Plan were to have a positive UAAL, then the old funding mechanism would apply.

## *Significant Factors Affecting Identification of Trends – 1993*

No benefit changes were passed by the 1993 Legislature. However, the Legislature passed legislation to reduce the required contribution rate of 4.09 percent down to 3.14 percent.

# ARIZONA STATE RETIREMENT SYSTEM

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## ***Significant Factors Affecting Identification of Trends – 1994***

### *Minimum LTD Benefit*

Each member on long term disability will receive a minimum monthly benefit of \$50.

### *Minimum Retiree Benefit*

Each retiree of the Arizona State Retirement Plan who is at least age 75 and who had 20 or more years of service at retirement will receive a minimum monthly benefit of \$600.

### *Pop-up Benefit*

Members who retired prior to January 1, 1992 and who elected a Joint and Survivor option shall receive a “Pop-up” in their retirement income if their beneficiary pre-deceases them.

### *Excess Investment Earnings COLA*

Retirees at least age 55 who have been retired at least one year and members on long-term disability are eligible to receive a cost-of-living adjustment equal to one-half the increase in CPI for the prior calendar year. The COLA will be paid from a reserve of Excess Investment Earnings. If there are no Excess Investment Earnings in reserve, no COLA will be granted.

### *Change in Section 38-737 Funding Period*

Section 38-737 was amended to change the funding period of the plan to a rolling 30-year period. The change is to be phased-in over the next nineteen years. If the Plan should cease to be overfunded, the funding period would immediately go to 30 years.

## ***Significant Factors Affecting Identification of Trends – 1995***

### *Change in Maximum Increase Provided by Excess Investment Earnings COLA*

The maximum COLA payable from Excess Investment Earnings was increased from 50 percent to 100 percent of the increase in the CPI.

### *Removal of LTD Benefit from the Plan*

The Legislature established a new LTD program and removed the LTD benefit from the plan. Liabilities for current LTD recipients were transferred to the new LTD program effective October 1, 1995.

### *Creation of Separate Account for the Health Premium Supplement*

The Health Premium Supplement benefit is to be separated into a 401(h) account. The assets and liabilities associated with the Health Premium Supplement will be accounted for separately.

## ***Significant Factors Affecting Identification of Trends – 1996***

*No material changes.*

# ARIZONA STATE RETIREMENT SYSTEM

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## *Significant Factors Affecting Identification of Trends – 1997*

### *Creation of Family Health Supplement*

Allows unused portion of the Health Supplement of a member or dependent to be used to pay the other recipients' health insurance premium.

The calculation methodology for the Excess Investment Earnings COLA was modified.

The contribution rate will be determined on a biennial cycle beginning with the 1999/2000 fiscal year.

## *Significant Factors Affecting Identification of Trends – 1998*

No material changes.

## **LEGISLATED PLAN CHANGES ENACTED BY THE 1999 LEGISLATURE OF THE STATE OF ARIZONA**

### **1. *Enhanced Refund Option***

Employees who terminate prior to eligibility for retirement may elect to receive a refund of their employee contributions with interest. If the employee has at least five years of service, the employee is also entitled to a share of the employer contributions with interest. The share is 25 percent with five years of service and increases 15 percent for each additional year of service to a maximum of 100 percent for ten or more years of service.

### **2. *Benefit Multiplier Increased to 2.1 percent***

The benefit multiplier increased from 2.0 percent to 2.1 percent effective July 1, 2000.

### **3. *5 percent Ad Hoc Increase***

A 5 percent retiree ad hoc increase for retirees and beneficiaries effective July 1, 2000.

### **4. *Increase in Maximum Service While on LTD***

Increase in the maximum amount of service that may be accrued while on LTD from 25 to 30.

### **5. *Changes in Permanent Benefit Increase COLA***

- a. The maximum aggregate COLA was increased from 3 percent to 4 percent.
- b. The threshold for determining "Excess Earnings" was lowered from 9 percent to 8 percent.
- c. The limitation of the COLA to the increase in the CPI was removed.

# ARIZONA STATE RETIREMENT SYSTEM

## ADDITIONAL SUPPLEMENTAL SCHEDULES SCHEDULE OF ADDITIONS AND DEDUCTIONS TEN-YEAR COMPARISON

Year	Additions by Source								Total
	Employee Contribution Made	Actuarial Employee Contribution	Employer Contribution Made	Actuarial**** Employer Contribution	Percent of Covered Payroll	Actuarially Determined Rate	Net Investment Income	Member Reimbursements and Other	
1990*	\$ 64,434,561	\$ 151,099,046	\$ 64,434,561	\$ 151,099,046	2.00%	4.69%	\$ 1,104,012,512	\$ 1,538,939	\$ 1,234,420,573
1991	133,364,246	133,364,246	133,364,246	133,364,246	3.82%	3.82%	797,492,654	788,617	1,065,009,763
1992	132,273,316	132,273,316	132,273,316	132,273,316	3.60%	3.60%	1,513,686,627	945,836	1,779,179,095
1993*	135,644,868	135,644,868	135,644,868	135,644,868	3.59%	3.59%	2,037,437,881	6,870,755	2,315,598,372
1994*	124,763,806	162,510,817	124,763,806	162,510,817	3.14%	4.09%	725,271,172	7,319,048	982,117,832
1995*	158,559,931	158,559,931	158,559,931	158,559,931	3.75%	3.75%	2,409,804,569	9,429,152	2,736,353,583
1996***	172,848,417	172,848,417	172,848,417	172,848,417	3.85%	3.85%**	2,063,877,940	4,376,224	2,413,950,998
1997	173,508,080	173,508,080	173,508,019	173,508,080	3.69%	3.69%	2,832,718,071	11,480,946	3,191,215,116
1998	176,768,737	176,768,737	176,768,738	176,768,738	3.54%	3.54%	3,405,203,114	15,461,646	3,774,202,235
1999	179,086,642	176,768,737	179,086,635	179,086,635	3.34%	3.34%	2,848,321,337	46,170,568	3,252,665,182

\* Other income includes Chapter 137 reimbursements of \$7,505,005, \$5,739,521 and \$5,482,267 for 1995, 1994 and 1993, respectively, which are outlined by State Statute for members buying back service into ASRS. For the fiscal years ended 1990 and 1994, the Legislature set the contribution rate below the actuarially determined rate as noted under "Percent of Covered Payroll" above. The change to an actuarially determined rate became effective in 1985.

\*\* The initial actuarial calculation indicated a total contribution rate of 7.90 percent in 1996. However, this was prior to separating long-term disability from retirement contributions. The effect of reporting long-term disability separately resulted in a new total contribution rate of 7.70 percent, 3.36 percent retirement and 0.49 percent long-term disability, for both employee and employer.

\*\*\* Investment income restated at market value for 1996. Investment income reported at market value for subsequent years.

\*\*\*\* Information is shown only for the years available in accordance with the parameters of GASB 25. Additional years will be added as data becomes available.

### Deductions by Type

Year	Benefits	Refunds	Investment	Administration and Other	Total
1991	\$320,349,203	\$ 27,410,639	\$ 43,207,264	\$ 6,516,477	\$397,483,583
1992	357,541,608	24,812,896	26,265,692	8,115,966	416,736,162
1993	422,183,217	21,444,985	29,599,274	6,210,761	479,438,237
1994	454,118,381	22,650,297	28,934,542	5,521,389	511,224,609
1995	495,150,932	24,516,184	32,403,873	5,970,049	558,041,038
1996	542,524,729	26,376,393	37,535,223	8,244,791	614,681,136
1997	596,308,127	31,282,457	45,248,028	12,307,628	685,146,240
1998	652,567,322	29,769,046	51,199,408	12,541,091	746,076,867
1999	713,870,779	26,108,152	65,886,652	15,352,673	821,218,256
2000	787,553,386	70,754,497	86,931,784	19,743,695	964,983,362

# ARIZONA STATE RETIREMENT SYSTEM

## SCHEDULE OF ADMINISTRATIVE EXPENSES (Retirement Fund) YEARS ENDED JUNE 30, 2000 AND 1999

	2000		1999	
	Budget	Actual	Budget	Actual
Personnel services:				
Salaries	\$ 5,180,600	\$ 4,936,881	\$ 4,346,800	\$ 5,114,275
Retirement contributions	196,516	102,040	123,900	118,577
Insurance	<u>873,484</u>	<u>837,639</u>	<u>790,100</u>	<u>703,156</u>
Total personnel services	<u>6,250,600</u>	<u>5,876,560</u>	<u>5,260,800</u>	<u>5,936,008</u>
Professional services:				
Computer support	600,000	267,852	1,891,400	1,040,225
Audit and consulting fees	55,650	59,082	55,700	53,250
Actuary/benefit consulting	125,000	153,700	132,000	150,320
Miscellaneous outside services	<u>850,000</u>	<u>905,431</u>	<u>718,900</u>	<u>583,456</u>
Total professional services	<u>1,630,650</u>	<u>1,386,065</u>	<u>2,798,000</u>	<u>1,827,251</u>
Communications:				
Postage	664,000	886,250	474,000	429,943
Printing	278,000	179,407	118,100	97,645
Telephone	<u>225,000</u>	<u>312,370</u>	<u>121,600</u>	<u>226,121</u>
Total communications	<u>1,167,000</u>	<u>1,378,027</u>	<u>713,700</u>	<u>753,709</u>
Miscellaneous:				
Board and Council		13,695	20,300	15,731
Office rent	903,400	903,400	903,400	648,400
Equipment	600,250	588,280	136,700	90,388
Furniture	10,000	25,711		40,157
Repair and maintenance	140,000	174,862	252,500	160,127
Equipment rental				2,569
Travel	49,700	46,690	49,700	47,054
Supplies	85,000	172,214	68,500	109,040
Insurance	76,400	75,900	76,400	76,400
Dues, subscriptions and publications and advertisement	20,000	38,734	39,800	26,392
Education and training	25,000	39,046	50,200	32,356
Miscellaneous	171,000	6,333	57,600	59,556
PERIS development	<u>460,500</u>	<u>382,083</u>	<u>451,200</u>	<u>351,210</u>
Total miscellaneous	<u>2,541,250</u>	<u>2,466,948</u>	<u>2,106,300</u>	<u>1,659,380</u>
TOTAL	<u>\$ 11,589,500</u>	<u>\$ 11,107,600</u>	<u>\$ 10,878,800</u>	<u>\$ 10,176,348</u>

# ARIZONA STATE RETIREMENT SYSTEM

## SCHEDULE OF LONG-TERM DISABILITY EXPENSES YEARS ENDED JUNE 30, 2000 AND 1999

	2000		1999	
	Budget	Actual	Budget	Actual
Personnel services:				
Salaries				\$ 112,963
Retirement contributions				3,453
Insurance				<u>6,549</u>
Total personnel services				<u>122,965</u>
Professional services:				
Miscellaneous outside services				
LTD management fee	<u>\$2,035,200</u>	<u>\$1,954,333</u>	<u>\$1,869,600</u>	<u>1,933,448</u>
Total professional services	<u>2,035,200</u>	<u>1,954,333</u>	<u>1,869,600</u>	<u>1,933,448</u>
Communications:				
Postage				
Printing				801
Telephone				
Total communications				<u>801</u>
<b>TOTAL</b>	<u><b>\$2,035,200</b></u>	<u><b>\$1,954,333</b></u>	<u><b>\$1,869,600</b></u>	<u><b>\$2,057,214</b></u>

Effective in fiscal year 1998, the Legislature began appropriating funding for the administrative costs of several ASRS programs, including Long-Term Disability, Health Insurance, and Outreach Education, actuarial expenses, and legal costs. Because administration of these programs is fully commingled with administration of overall ASRS, separate budgets were not approved for each program. The amounts shown in the actual column for fiscal year 1998/1999 and 1999/2000 represent only those specifically assigned to the Long-Term Disability Program.

# ARIZONA STATE RETIREMENT SYSTEM

## SCHEDULES OF CASH RECEIPTS AND CASH DISBURSEMENTS YEARS ENDED JUNE 30, 2000 AND 1999

	2000	1999
CASH BALANCE, beginning of year	\$ 3,066,500	\$ 2,541,070
RECEIPTS:		
Member contributions	151,550,860	179,392,392
Employer contributions	157,297,150	179,392,392
Purchase of back service (membership reimbursements)	32,177,546	46,170,568
Transfers from other retirement systems	947,419	490,052
Short-term securities matured and sold	5,814,597,235	5,996,916,525
Investments matured and sold	14,119,217,128	14,983,181,030
Real estate sold		12,892,617
Mortgage principal payments and sales	40,414,328	39,301,757
Building revenue	6,168,844	6,937,609
Securities lending program	64,151,006	45,799,120
Interest	211,547,477	441,817,792
Dividends	158,935,759	149,568,837
Miscellaneous	4,605,813	4,819,453
TOTAL RECEIPTS	<u>20,761,610,565</u>	<u>22,086,680,144</u>
DISBURSEMENTS:		
Retirement, disability and subsidy payments	775,100,305	701,460,870
Death benefits	13,255,861	11,484,518
Refunds to withdrawing members	70,754,497	26,108,152
Transfers to other retirement systems	5,829,167	1,498,778
Short-term investments purchased	5,817,543,496	6,500,125,932
Investment purchases	13,866,207,450	14,712,646,616
Mortgage purchases	20,325,000	57,510,000
Securities lending program charges	57,301,334	40,605,498
Investment manager fees	28,590,130	17,529,794
Building expenses	4,976,208	5,277,091
Administrative expenses	13,992,396	11,693,453
Miscellaneous	2,128,271	214,012
TOTAL DISBURSEMENTS	<u>20,676,004,115</u>	<u>22,086,154,714</u>
CASH BALANCE, end of year	<u>\$ 88,672,950</u>	<u>\$ 3,066,500</u>

# ARIZONA STATE RETIREMENT SYSTEM

## SCHEDULE OF PROFESSIONAL CONSULTANT FEES YEAR ENDED JUNE 30, 2000

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<b>Professional/Consultant</b>	<b>Nature of Service</b>	<b>Expenses</b>
Mellon Bank	Pension Payment Services	\$ 421,268
Capitol Systems Group	Computer Systems	212,909
Attorney General Office	Legal Services	161,500
Watson Wyatt	Actuary Services	153,700
Kelly Services, Inc.	Temporary Agency Services	121,679
Deloitte and Touche LLP	Audit Services	59,082
Ernst & Young	Imaging Consulting Services	54,913
West Group Research	Pension Research Consultant	43,235
AzTech Professional Services	Computer Systems	41,890
Charles Whetstine	Legal Services	33,549
Tab Products	Records Management Services	20,910
Buck Consultants, Inc.	Pension Consultants	19,692
Bank One AZ	Legal Services	13,329
Science Applications	Computer Web Site Services	12,376
Simonton Solutions, LLC	Procurement Services	6,771
Braille Plus	Blind Transcription Service	2,590
Kathleen Phillips	Legal Services	2,500
Community Outreach Program for the Deaf	Deaf Transcription Service	1,056
Prism Software Corp.	Computer Systems	720
Yoder and McFate Reporting	Transcription Services	468
Audio Visual Integration	Audio Conferencing Services	450
Sun Sounds Radio Reading	Digital Recording Services	412
Security Data Destruction	Security Recycling Service	348
Library Archives and Public Records	Record Archival Service	329
ASAP Software Express, Inc.	Computer Programming Services	243
DOA Information Services	Computer Systems	136
Rainbow Couriers	Courier Service	<u>10</u>
Total		<u>\$ 1,386,065</u>

# ARIZONA STATE RETIREMENT SYSTEM

## NET INVESTMENT INCOME EXPERIENCE BY MANAGER YEAR ENDED JUNE 30, 2000

The following chart will serve to show the amount of investment income produced during the year by each of the investment managers.

Manager	Dividends, Interest and Other	Market Appreciation (Depreciation)	Management Fees	Net Investment Income Produced
ASRS – Internal	\$ 144,488,100	\$ 309,132,479		\$ 453,620,579
Axe – Houghton Domestic	1,860,805	3,088,929	\$ 92,807	4,856,927
Axe – Houghton International	18,928,935	192,944,195	1,031,467	210,841,663
Bank of Ireland International	11,327,962	127,451,925	1,846,864	136,933,023
Bank One	16,965,255	(3,133,861)	308,829	13,522,565
BGI – Core	(4,631,047)	199,257,255	477,409	194,148,799
BGI – International	1,359,432	41,784,023	146,888	42,996,567
BGI – Tactical		143,123,828	3,040,058	140,083,770
Blackrock	46,281,628	(14,878,267)	1,048,443	30,354,918
Brandes International	18,454,616	183,787,905	2,774,927	199,467,594
Brandywine	2,667,084	(34,703,682)	703,761	(32,740,359)
Capital Guardian International	10,658,648	274,563,397	3,067,297	282,154,748
Cash Management	11,179,812	(414,331)		10,765,481
Conseco Capital	1,658,767	122,350,080	696,557	123,312,290
Dimensional Fund	2,807,317	(12,916,338)	461,859	(10,570,880)
Duff & Phelps	16,217,454	305,415	90,000	16,432,869
J. P. Morgan	49,761,750	(14,834,209)	2,444,810	32,482,731
Mellon Domestic	21,886,672	79,850,253	1,948,807	99,788,118
Mellon International	7,217	191,564	59,060	139,721
State Street	26,908	42,114,815	36,297	42,105,426
Valley Ventures	53	(18,988)		(18,935)
Western Asset Mgmt Co	<u>37,582,389</u>	<u>(13,451,150)</u>	<u>892,869</u>	<u>23,238,370</u>
	<u>\$ 409,489,757</u>	<u>\$1,625,595,237</u>	<u>\$21,169,009</u>	<u>\$2,013,915,985</u>

NOTE: Not included above are interest, fees and other items which are netted against income.

For Fiscal 1999-00 the total rate of return was 10.00 percent, the yield on cost will be provided in the fiscal year 2000 actuarial valuation. The net effective yield was 10.78 percent.

# ARIZONA STATE RETIREMENT SYSTEM

## TOTAL INVESTMENT EXPENSES BY MANAGER YEAR ENDED JUNE 30, 2000

Manager	Management Fees	Real Estate	Security Loan Program	Total Investment Expenses 2000	Total Investment Expenses 1999
Axe – Houghton Domestic	\$ 92,807			\$ 92,807	\$ 241,255
Axe – Houghton International	1,031,467			1,031,467	783,419
Bank of Ireland International	1,846,864			1,846,864	1,172,862
Bank One	308,829	\$ 5,304,467		5,613,296	6,944,694
BGI – Core	477,409			477,409	1,116,273
BGI – International	146,888			146,888	497,332
BGI – Tactical	3,040,058			3,040,058	4,227,372
Blackrock	1,048,443			1,048,443	512,474
Brandes International	2,774,927			2,774,927	1,543,057
Brandywine	703,761			703,761	601,239
Capital Guardian International	3,067,297			3,067,297	1,925,491
Cash Management			\$60,458,308	60,458,308	41,781,659
Conseco Capital	696,557			696,557	43,302
Dimensional Fund	461,859			461,859	335,474
Duff & Phelps	90,000			90,000	90,000
J P Morgan	2,444,810			2,444,810	2,144,636
Mellon Domestic	1,948,807			1,948,807	1,298,399
Mellon International	59,060			59,060	111,560
State Street	36,297			36,297	
Western Asset Mgmt Co	<u>892,869</u>	<u>                    </u>	<u>                    </u>	<u>892,869</u>	<u>516,155</u>
Total	<u>\$ 21,169,009</u>	<u>\$ 5,304,467</u>	<u>\$60,458,308</u>	<u>\$ 86,931,784</u>	<u>\$ 65,886,652</u>

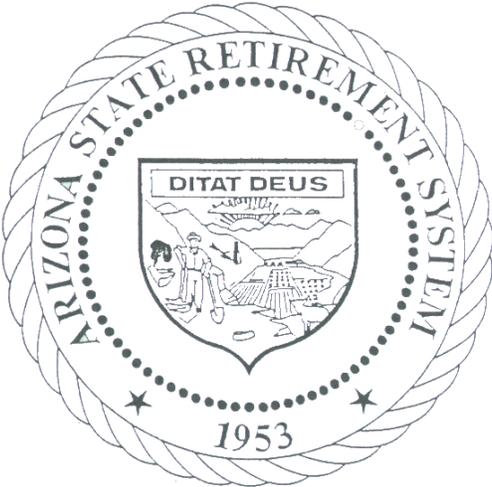
# ARIZONA STATE RETIREMENT SYSTEM

## INVESTMENT MANAGER EXPENSES YEARS ENDED JUNE 30, 2000 AND 1999

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	2000	1999
Barclays Global Investors	\$ 3,664,355	\$ 5,840,977
Capital Guardian Trust	3,067,297	1,925,491
Brandes Investment Partners, L.P.	2,774,927	1,543,057
J.P. Morgan Investment Management	2,444,810	2,144,636
Mellon Equity Associates	1,948,807	1,298,399
Bank of Ireland Asset Management	1,846,864	1,172,862
Axe – Houghton Associates, Inc.	1,124,274	1,024,674
Blackrock Financial Management	1,048,443	512,474
Western Asset Management Company	892,869	516,155
Brandywine Asset Management, Inc.	703,761	601,239
Conseco	696,557	43,302
Dimensional Fund Advisors, Inc.	461,859	335,474
Bank One AZ	308,829	369,494
Duff & Phelps Investment	90,000	90,000
Mellon Capital Management Corp.	59,060	111,560
State Street	<u>36,297</u>	<u>          </u>
Total Money Managers	<u>\$ 21,169,009</u>	<u>\$ 17,529,794</u>

# INVESTMENT PORTFOLIO SECTION



# ARIZONA STATE RETIREMENT SYSTEM

## COMPREHENSIVE ANNUAL FINANCIAL REPORT INDEX – INVESTMENT PORTFOLIO SECTION

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# ARIZONA STATE RETIREMENT SYSTEM

## INVESTMENT REPORT

BY PAUL MATSON, CHIEF INVESTMENT OFFICER AND  
KARL L. POLLEN, JR., INVESTMENT REVIEW BOARD CHAIRMAN

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### Economic Climate

The U.S. economy continued its current, lengthy expansion over the course of the year. Growth was high in the third quarter of 1999 with GDP rising at an annual rate of 5.7 percent from the prior quarter's annual rate of 2.5 percent. Also during the third quarter, the unemployment rate declined slightly from 4.3 percent to 4.2 percent. The combined effect of higher GDP rates and lower employment caused the Federal Reserve to raise the Discount Rate and the Federal Funds Rate by 25 basis points in August 1999. The economy accelerated its growth in the fourth quarter of 1999 with GDP rising at a stunning annual rate of 8.3 percent. The unemployment rate dropped to 4.1 percent, its lowest level in 30 years. Concern of an overheating economy prompted the Federal Reserve to tighten monetary policy, raising rates by 25 basis points in November. The Fed did not raise rates in December, citing Y2K concerns, but interest rates kept nudging upward in expectations of future Fed tightening.

In the first quarter of the new millennium, GDP growth slowed relative to the previous quarter, but remained high nonetheless rising at an annual rate of 4.8 percent. The Federal Reserve continued to tighten monetary policy raising rates by 25 basis points in mid-March. The Treasury announced a planned buyback of \$30 billion in long Treasury bonds and a reduction in the size of the 30-year Treasury auction.

The current expansion entered a record 10th year at the beginning of the second quarter of 2000. The economy grew faster than expected in the second quarter, as the GDP growth rate rose at an annual rate of 5.3 percent. The unemployment rate edged down to 4.0 percent in this quarter. As a result, the Federal Reserve tightened monetary policy in May, raising rates by 50 basis points to a nine-year high of 6.5 percent. This was the third interest rate increase for the calendar year and the sixth interest rate increase that had occurred over the last thirteen months.

### Capital Markets

The U.S. equity market posted negative returns in the third quarter of 1999 for all major U.S. stock indices as measured by the S&P 500 (-6.2 percent), S&P MidCap (-8.4 percent), and the Russell 2000 (-6.3 percent). However, the domestic equity market ended the year with a bang as all major stock indices closed in the fourth quarter of 1999 at record highs. The returns for the fourth quarter of 1999 as measured by the major U.S. stock indices were S&P 500 (14.9 percent), S&P MidCap (17.2 percent), and the Russell 2000 (18.4 percent). Also of note was the significant difference in the returns posted by the Growth and Value components of the major stock indices for the quarter. This was evidenced by the components of the S&P 500 (S&P Growth posting a 19.7 percent return relative to the S&P Value posting a return of 9.0 percent) and the components of the Russell 2000 (Russell 2000 Growth returning 33.4 percent and the Russell Value returning 1.5 percent).

Returns posted by the US fixed income market remained relatively flat during the last half of 1999. Third quarter and fourth quarter returns as measured by the Lehman Aggregate Index were .7 percent and -.1 percent respectively. International Equity markets posted returns as good as or better than that of the U.S. Equity market during the third and fourth quarters of 1999. Third quarter and fourth quarter returns as measured by the MSCI EAFE (Net) Index were 4.4 percent and 17.0 percent respectively.

# ARIZONA STATE RETIREMENT SYSTEM

## INVESTMENT REPORT

BY PAUL MATSON, CHIEF INVESTMENT OFFICER AND  
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The first quarter of the new millennium saw a dramatic run-up in the valuation of technology stocks that through March 11, 2000 posted a 24 percent return as measured by the level of the NASDAQ. Although the sell-off of technology stocks that ensued at the end of the first quarter affected most U.S. equity markets, all major stock indices provided positive returns for the first quarter. Returns posted for the quarter were 2.3 percent for the S&P 500, 12.7 percent for the S&P MidCap, and 7.1 percent for the Russell 2000. During the second quarter of 2000, investors watched the effects of the Federal Reserve's six interest rate increases over the last thirteen months take hold. The heavy tech sell-off that began in March 2000 continued through April and resulted in negative returns for all the major U.S. stock indices in the second quarter. Returns posted for the second quarter were -2.7 percent for the S&P 500, -3.3 percent for the S&P MidCap, and -3.8 percent for the Russell 2000.

Two forces collided in the fixed income market in the first quarter of the new millennium: Fed tightening, and the Treasury's buyback of long-term bonds in tandem with a reduction in the size of the 30-year Treasury auction. As a result, Treasuries had the second best quarter in four years gaining 3.8 percent and Long Treasuries returned 8.1 percent. First quarter returns as measured by the Lehman Aggregate Index were 2.2 percent, the largest quarter gain since the fall of 1998. Second quarter returns as measured by the Lehman Aggregate Index were 1.7 percent. International Equity markets posted returns similar to that of the U.S. Equity market during the first and second quarters. Third quarter and fourth quarter returns as measured by the MSCI EAFE (Net) Index were -.1 percent and -4.0 percent, respectively.

### ASRS Investment Results

The ASRS acted on several occasions to adjust the asset allocation to stay within the allocation parameters established by the ASRS Board. The asset allocation adopted by the ASRS Board during the fourth quarter of 1999 (implemented January 1, 2000), 30 percent U.S. fixed income, 53 percent U.S. equities, and 17 percent international equities allowed the ASRS to participate handsomely in the bull market. The target mix reflects the need for the fund to be well positioned to generate a long-term annual return of at least the actuarial rate of 8 percent. A band of +3 percent about the target allocation in each category serves as the minimum and maximum proportions to each asset class.

The Arizona State Retirement System total Fund returned 10.0 percent in the fiscal year ended June 30, 2000, over 1.2 times the actuarial assumed long run return target.

### Investment Policies

The Arizona State Retirement System adheres to all statutory requirements set forth by Arizona state law, which applies upper limits to the portions of the fund that may be invested in any single entity, international equities, or total equities. The Arizona State Retirement System has also established investment guidelines for its external investment managers and a complete set of policies, procedures, compliance requirements, and oversight of internal investment management to ensure that investment assets are prudently managed. Both internal and external audit procedures are in place. Oversight and direction responsibilities are ensconced with the Board.

# **ARIZONA STATE RETIREMENT SYSTEM**

## **INVESTMENT REPORT**

**BY PAUL MATSON, CHIEF INVESTMENT OFFICER AND  
KARL L. POLLEN, JR., INVESTMENT REVIEW BOARD CHAIRMAN**

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The Arizona State Retirement System adheres to the following five investment goals:

1. Retain safety as the principal consideration in the investment of the ASRS assets.
2. Achieve the actuarial investment return of 8 percent.
3. Maintain a minimum funded status of 100 percent.
4. Support excess earnings Permanent Benefit Increase (“PBI”) (formerly known as Cost of Living allowance or COLA).
5. Maintain a relatively stable contribution rate.

The Arizona State Retirement System is well positioned to achieve the above-listed investment goals.

# ARIZONA STATE RETIREMENT SYSTEM

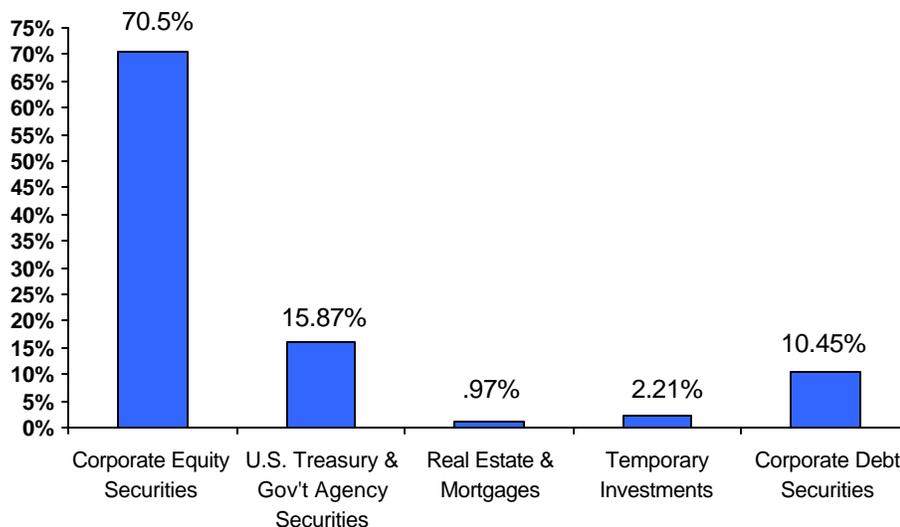
## SCHEDULE OF INVESTMENTS

YEAR ENDED JUNE 30, 2000

	<b>Fair Value</b>
Corporate Equity Securities	<u>\$ 16,982,231,909</u>
Fixed Income Securities:	
Corporate Debt Securities	2,516,040,100
U.S. Treasury & Gov't Agency Securities	3,823,679,166
Real Estate and Mortgages	233,092,170
Temporary Investments	<u>532,740,815</u>
Total Fixed Income Securities	7,105,552,251
Net Receivables on Transactions	<u>(263,492,443)</u>
<b>TOTAL PORTFOLIO</b>	<u><b>\$ 23,824,291,717</b></u>

## INVESTMENT PORTFOLIO COMPONENTS

(at fair value)



# EQUITY PORTFOLIO PROFILE

YEAR ENDED JUNE 30, 2000

<b>Ten Largest Domestic Equity Holdings</b>	<b>Percent of Domestic Equity Portfolio</b>
General Electric Co. Com.	3.60%
Cisco Sys Inc. Com	3.30%
Intel Corp. California Com.	3.20%
Microsoft Corp. Com	3.10%
Pfizer Inc. Com. Stk. USD0.05	2.20%
Exxon Mobil Corp.	2.10%
Walmart Stores Inc. Com.	1.80%
Oracle Corporation Com.	1.60%
Citigroup Inc. Com.	1.60%
Sun Microsystems Inc. Com.	<u>1.30%</u>
Total	<u><u>23.80%</u></u>

<b>Ten Largest Foreign Equity Holdings</b>	<b>Percent of Foreign Equity Portfolio</b>
Vodafone Airtouch Ord USD0.10	2.00%
Ing Groep N V CVA NLG1	1.60%
Hitachi Ltd Y50	1.10%
NEC Corp. Y50	1.10%
Nestle SA Regd Zur Listing	1.10%
Total Fina Elf Eur10	0.90%
Nokia Corp. Spon Adr Com.	0.90%
DBS Holdings SGD1	0.90%
Telecom Italia Spa Ord ITL1000	0.80%
Vodafone Airtouch PLC	<u>0.80%</u>
Total	<u><u>11.20%</u></u>

## Distribution by Market Sector

<b>Market Sector</b>	<b>ASRS Domestic Equity</b>	<b>S&amp;P 500</b>
Basic materials	4.2%	3.8%
Consumer (cyclical)	6.6%	6.0%
Consumer (non-cyclical)	5.9%	6.6%
Consumer services	4.8%	4.6%
Commercial services	2.8%	2.5%
Energy	6.1%	6.0%
Financial	17.2%	17.9%
Healthcare	12.0%	11.7%
Industrials	3.6%	3.3%
Technology	27.7%	28.7%
Telecommunications	5.5%	6.0%
Transport	0.9%	0.6%
Utility	<u>2.7%</u>	<u>2.3%</u>
Total	<u><u>100.0%</u></u>	<u><u>100.0%</u></u>

## Summary of Broker Commissions

<b>Investment Type</b>	<b>Commissions</b>
Domestic equity	\$ 2,979,103
Foreign equity	\$ 2,320,482

**NOTE:** A detail listing of investments available upon request.

Direct your request to the ASRS, 3300 N. Central Ave., Phoenix, AZ

# FIXED INCOME PORTFOLIO PROFILE

YEAR ENDED JUNE 30, 2000

<b>Ten Largest Fixed Income Holdings</b>	<b>Coupon</b>	<b>Maturity</b>	<b>Percent of Fixed Income Portfolio</b>
U.S. Treasury Notes	5.875%	11/15/2004	1.90%
U.S. Treasury Inflation Index	3.875%	4/15/2029	1.70%
U.S. Treasury Bonds	8.500%	2/15/2020	1.50%
Principal Treasury Receipt	0.000%	8/15/2004	1.40%
Certificate of Accrual on United States	0.000%	5/15/2004	1.10%
U.S. Treasury Notes	6.500%	2/15/2010	0.90%
U.S. Treasury Bonds	8.000%	11/15/2021	0.90%
U.S. Treasury Stripped Coupons	0.000%	1/15/2008	0.90%
U.S. Treasury Bonds	8.875%	8/15/2017	0.70%
Resolution Funding Corporation Strip	0.000%	7/15/2005	0.70%

## **Distribution by Coupon**

	<b>Percent</b>
0.00% – 6.5%	54.0%
6.51% – 7.5%	27.0%
7.51% – 9.0%	15.1%
9.01% and over	<u>3.9%</u>
	<u><u>100.0%</u></u>

## **Duration**

0 to 2 years	7.8%
2 to 3 years	3.9%
3 to 4 years	6.6%
4 to 5 years	8.2%
5 to 6 years	3.0%
6 to 8 years	5.9%
8 years and above	<u>64.6%</u>
	<u><u>100.0%</u></u>

## **Distribution by Issue**

U.S. Treasury	29.0%
Mortgage-backed securities	39.2%
Corporates	<u>31.8%</u>
	<u><u>100.0%</u></u>

# SCHEDULE OF BROKER COMMISSIONS

## DOMESTIC EQUITY TRADES

YEAR ENDED JUNE 30, 2000

Broker Name	Broker Code	No. of Shares	Commission Per Share	Total Dollar Amount of Trades	Commission
ABEL NOSER CORP NEW YORK	ABE	588,400	0.020	\$ 16,467,884	\$ 11,768
ABN AMRO CHICAGO CORP CHICAGO	CHI	605,200	0.039	24,410,667	23,349
AUTRANET INC NY	ATN	331,700	0.060	14,492,465	19,902
B TRADE SVCS LLC NEW YORK	T5R	98,050	0.020	11,300,946	1,961
BAIRD ROBERT W & CO INC MILWAUKEE	RBC	27,100	0.030	1,101,751	813
BANCBOSTON ROBERTSON STEPHENS SAN FRAN	RCM	89,500	0.030	5,928,470	2,685
BEAR STEARNS & CO INC NEW YORK	BEA	3,514,670	0.032	182,732,138	112,452
BERNSTEIN SANFORD C & CO NEW YORK	SAN	92,200	0.060	4,573,860	5,532
BOSTON INSTITUTIONAL SVCS INC BOSTON	BVS	9,066,548	0.060	478,817,311	543,992
BREAN MURRAY FOSTER INC NY	BRE	11,200	0.030	352,401	336
BRIDGE TRADING CO ST LOUIS	BEO	1,420,564	0.033	50,926,269	47,264
BROOKS SECURITIES INC CLEVELAND	BRJ	626,000	0.056	20,421,648	35,061
BT ALEX BROWN INC BALTIMORE	ALX	6,900	0.030	521,157	207
BUCKINGHAM RESEARCH GRP INC BROOKLYN	R4X	273,100	0.030	8,173,755	8,193
CANTOR FITZGERALD & CO INC NEW YORK	CAN	264,200	0.060	10,066,990	15,852
CAPITAL INSTL INVESTORS DALLAS	CIV	1,093,115	0.060	65,615,926	65,587
CREDIT SUISSE FIRST BOSTON CORP N Y	FOB	1,787,650	0.047	79,819,868	84,634
DB CLEARING SVCS NEW YORK	CYT	660,000	0.060	30,854,782	39,600
DEUTSCHE BK SEC INC NEW YORK	CYS	3,400,469	0.068	142,444,939	231,233
DEUTSCHE MORGAN GRENPELL NEW YORK	DBC	10,000	0.030	675,300	300
DONALDSON LUFKIN & JENRETTE NEW YORK	DON	2,012,350	0.052	106,336,955	104,397
DOUGAL & ASSOCIATES JERSEY CITY	VIW	1,366,360	0.020	52,859,310	27,327
DRESDNER KLEINWORT BENSON NEW YORK	ABD	39,700	0.054	1,912,754	2,158
ERNST & CO NEW YORK	ERN	140,300	0.030	6,830,816	4,209
FIDELITY CAP MKTS (DIV OF NFSC) BOSTON	IOC	393,700	0.060	29,552,852	23,622
FIRST ALBANY CORP ALBANY	FIA	228,600	0.033	11,665,626	7,449
FIRST UNION CAP MKTS CHARLOTTE	IY6	8,800	0.030	622,018	264
FOX-PITT KELTON INC	ZJI	7,400	0.060	514,764	444
FRANCIS P MAGLIO & CO INC NEW YORK	I4I	164,500	0.030	3,123,354	4,935
FURMAN SELZ MAGER NEW YORK	FFF	162,100	0.066	7,368,414	10,706
GEORGE K BAUM	GKB	14,300	0.030	1,628,250	429
GOLDMAN SACHS & CO NY	GOL	1,840,800	0.048	100,697,340	89,086
GORDON HASKETT CAP CORP NJ	131	6,200	0.030	387,165	186
GRUSS OSCAR & SONS NEW YORK	GRO	3,500	0.030	289,948	105
GUZMAN & CO	GUZ	261,655	0.025	12,175,726	6,541
GUZMAN & CO NEW YORK	Q4K	475,100	0.025	20,785,443	11,878
HAMBRECHT & QUIST INC SAN FRANCISCO	HAQ	139,800	0.055	5,751,325	7,662
HOEING & CO INC NY	F46	292,300	0.025	13,689,895	7,308
INSTINET CORPORATION NY	IET	854,304	0.025	51,903,465	21,295
INVESTMENT TECHNOLOGY GROUPS NEW YORK	EUI	2,187,200	0.022	96,038,976	48,163
ISI GROUP INC NY	RTG	47,200	0.030	2,013,804	1,416
JACKSON PARTNERS & ASSOCS INC NEW YORK	C3E	675,000	0.023	28,645,650	15,519
JANNEY MONTGOMERY SCOTT PHILADELPHIA	JAN	41,500	0.030	2,263,329	1,245
JEFFERIES & CO INC NEW YORK	JEF	55,100	0.045	3,173,789	2,507
JONES & ASSOC WESTLAKE VILLAGE	ZIO	229,900	0.053	15,873,382	12,159

Broker Name	Broker Code	No. of Shares	Commission Per Share	Total Dollar Amount of Trades	Commission
KING C L & ASSOC ALBANY	KNG	164,000	0.030	7,204,824	4,920
KNIGHT SECS NEW JERSEY	224	34,500	0.030	1,882,087	1,035
LAZARD FRERES & CO NEW YORK	LAZ	465,100	0.030	20,525,844	14,154
LEGG MASON WOOD WALKER INC BALTIMORE	EAS	9,400	0.060	713,284	564
LEHMAN BROS INC NEW YORK	LXI	3,392,247	0.048	157,161,271	163,489
LEWCO SECS/AGENT FOR SCHRODER WERTHEIM	WSI	709,700	0.049	37,277,615	34,561
LYNCH JONES & RYAN INC HOUSTON	AVN	1,177,099	0.060	70,818,536	70,626
MCDONALD	MCD	26,300	0.030	1,486,602	789
MERRILL LYNCH PIERCE FENNER SMITH INC NY	MER	2,838,850	0.051	126,251,835	144,348
MERRILL LYNCH PROFESSIONAL CLRG PURCHAS	WAS	42,300	0.030	2,518,784	1,269
MONTGOMERY SECURITIES SAN FRANCISCO	MON	2,653,343	0.047	78,967,930	125,686
MORGAN J P SECS INC NEW YORK	MRP	387,200	0.060	15,599,161	23,232
MORGAN STANLEY & CO INC NY	MOS	2,326,487	0.052	114,014,044	122,059
NEEDHAM & CO	NEE	45,000	0.030	2,761,467	1,350
OPPENHEIMER & CO INC NEW YORK	OPP	71,900	0.059	2,820,793	4,211
PACIFIC CREST SECS PORTLAND	DFD	14,500	0.030	639,205	435
PAIN WEBBER INC NJ	PAI	1,729,100	0.052	67,201,195	89,706
PIPER JAFFRAY & HOPWOOD INC	PIP	268,000	0.037	12,515,958	10,031
PRUDENTIAL SEC INC NEW YORK	BAC	1,008,400	0.039	42,033,806	39,607
RAYMOND JAMES & ASSOC INC ST PETERSBURG	RAY	328,800	0.053	21,039,453	17,410
ROBBINS & HENDERSON	D7P	13,000	0.030	856,780	390
SANDS BROS & CO LTD NEW YORK	V8I	66,200	0.030	4,488,812	1,986
SCHWAB CHARLES & CO INC SAN FRANCISCO	SWB	68,400	0.030	4,435,863	2,052
SEI FINANCIAL SERVICES CO NY	L31	90,700	0.060	8,161,292	5,442
SG COWEN SECS CORP NEW YORK	COC	930,890	0.060	47,318,829	55,406
SMITH BARNEY INC NEW YORK	SHY	3,559,497	0.051	136,307,594	180,237
SOUNDVIEW FINL GROUP STANFORD	QYP	11,800	0.030	777,252	354
SPEAR LEEDS & KELLOGG	SLK	785,450	0.026	36,231,074	20,072
STANDARD & POORS SEC INC NEW YORK	POO	60,500	0.060	7,745,905	3,630
STATE STREET BROKERAGE SVCS BOSTON	T9U	903,441	0.025	38,975,926	22,526
SUTRO AND CO INC SAN FRANCISCO	STJ	28,500	0.030	1,392,322	855
THOMSON INSTITUTIONAL SVCS INC NY	BIT	90,200	0.060	4,228,678	5,412
TROSTER SINGER STEVENS ROTHCHILD CORP.	TSS	800	0.020	53,413	16
TUCKER ANTHONY & R.L. DAY INC	TAR	12,500	0.030	620,052	375
WACHOVIA SEC INC CHARLOTTE	ISC	211,700	0.049	13,985,243	10,284
WALTER J DOWD INC NEW YORK	746	388,585	0.019	14,946,761	7,336
WARBURG DILLON READ LLC NEW YORK	SBI	1,042,402	0.048	62,591,384	50,485
WEEDEN & CO NEW YORK	WEE	777,800	0.060	40,520,758	46,476
WESTMINSTER SECS CORP NEW YORK	WSA	1,730,817	0.020	75,723,437	34,556
<b>TOTAL</b>		<u>\$ 64,079,643</u>	<u>\$ 3.401</u>	<u>\$ 3,008,597,945</u>	<u>\$ 2,979,103</u>

# SCHEDULE OF BROKER COMMISSIONS

## FOREIGN EQUITY TRADES

YEAR ENDED JUNE 30, 2000

Broker Name	No. of Shares	Commission per Share	Total Dollar Amount of Trades	Commission
ABG SECS STOCKHOLM	2,400	0.039	\$ 37,620	\$ 94
ABN AMRO AUST SYDNEY	17,100	0.009	49,050	148
ABN AMRO CHICAGO CORP CHICAGO	1,076,903	0.010	6,145,158	10,682
ABN AMRO EQ AUST LTD SYDNEY	334,850	0.018	3,128,875	5,862
ABN AMRO EQUITIES (UK) LTD LONDON	206,049	0.036	4,911,034	7,512
ABN AMRO HOARE GOVETT LONDON	873,600	0.015	7,500,148	12,923
ABN AMRO SECS USA INC NEW YORK	448,648	0.009	2,439,242	4,240
ALFRED BERG LONDON	5,000	0.039	79,024	197
ALPHA MGMT INC/BROADCORT CAP CLNG NY	70,000	0.050	6,298,264	3,500
ANDERSON BRATENIUS GRUNDBERG SWEDEN	18,500	0.051	463,521	935
ARNHOLD & S BLEICHROEDER NEW YORK	1,514,715	0.069	60,872,829	104,680
B TRADE SVCS LLC NEW YORK	12,000	0.020	329,938	240
BANK JULIUS BAER FRANKFURT	65,571	0.128	3,343,637	8,368
BANQUE PARIBAS PARIS	19,500	0.376	3,600,488	7,328
BARING SECURITIES LTD HONG KONG	275,237	0.044	9,181,367	12,104
BEAR STEARNS & CO INC NY	17,400	0.050	597,798	870
BROADCOURT CAP CORP/SUB OF MLPF&SNY	222,918	0.049	10,966,055	10,843
BROCKHOUSE AND COOPER MONTREAL	300,550	0.012	2,094,890	3,464
C S FIRST BOSTON HONG KONG	541,000	0.019	3,922,234	10,262
CANADIAN IMP BK COM TORONTO (T431COMT)	45,700	0.041	1,297,844	1,868
CAZENOVE & CO LONDON	781,713	0.014	6,617,385	10,671
CAZENOVE & CO OVERSEAS HONG KONG	45,000	0.046	644,864	2,050
CHARTERHOUSE TILNEY LONDON	594,395	0.007	2,967,905	4,424
CHEVREUX DE VIREU STOCKHOLM	17,000	0.260	1,773,244	4,422
CHEVREUX DE VIRIEU SA PARIS	329,100	0.058	9,200,991	19,135
CI NORDIC SEC AB STOCKHOLM	30,600	0.113	1,729,001	3,465
CITIBANK NA LONDON	26,260	0.017	301,441	453
COMMERZBANK AG FRANKFURT	1,500	0.116	69,498	174
COMMERZBANK LONDON	2,300	0.022	33,031	50
CREDIT AGRICOLE INDOSUEZ MADRID	300	0.050	6,128	15
CREDIT AGRICOLE SECS NY	3,700	0.052	76,250	191
CREDIT LYONNAIS SECS HONG KONG	10,000	0.121	192,830	1,213
CREDIT LYONNAIS SECS (ASIA) HONG KONG	592,500	0.019	4,373,352	11,441
CREDIT LYONNAIS SECS SINGAPORE	205,000	0.042	2,621,404	8,573
CREDIT SUISSE FIRST BOSTON (EUROPE)	1,688,440	0.025	26,099,255	41,825
CREDIT SUISSE FIRST BOSTON (EUROPE) LON	17,250	0.032	366,589	546
CREDIT SUISSE FIRST BOSTON AUSTRALIA EQ	30,637	0.019	282,833	568
CREDIT SUISSE FIRST BOSTON CORP N Y	801,068	0.052	21,267,161	41,881
CREDIT SUISSE FIRST BOSTON HK SECS HK	28,000	0.031	348,034	872
CREDIT SUISSE FIRST BOSTON LONDON	113,310	0.023	1,727,105	2,595
CREDIT SUISSE FIRST BOSTON TOKYO	37,000	0.024	1,571,543	877
CS FIRST BOSTON EQUITIES LONDON	523,100	0.017	6,073,163	9,060
CSFB AUSTRALIA EQ LTD MELBOURNE	195,500	0.023	2,121,390	4,496
DAIWA SECS AMER INC NY	800	10.136	10,792,485	8,109
DAIWA SECS SB CAP MKTS CO LTD JAPAN	286,000	0.018	4,707,964	5,250

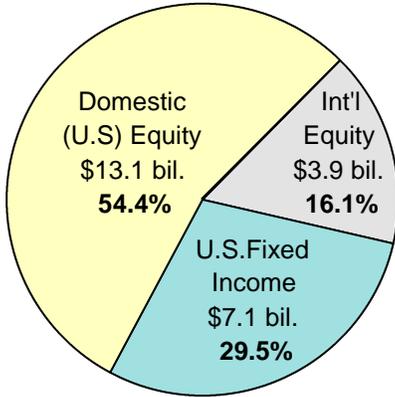
Broker Name	No. of Shares	Commission per Share	Total Dollar Amount of Trades	Commission
DAVY STOCKBROKERS DUBLIN	115,200	0.014	789,282	1,569
DB CLEARING SVCS NEW YORK	89,600	0.050	6,065,709	4,480
DEUTSCHE BK AG LONDON	301,321	0.023	4,696,685	7,042
DEUTSCHE BK FRANKFURT	122,400	0.107	8,442,061	13,144
DEUTSCHE BK LONDON	23,600	0.085	1,446,182	1,998
DEUTSCHE BK SEC CORP	807,600	0.021	7,979,856	16,769
DEUTSCHE BK SEC INC NEW YORK	4,924,201	0.015	35,166,104	75,160
DEUTSCHE MORGAN GRENPELL AUS LTD LONDON	286,932	0.071	11,137,875	20,237
DEUTSCHE MORGAN GRENPELL FRANKFURT	6,000	0.497	1,985,541	2,983
DEUTSCHE MORGAN GRENPELL LONDON	676,407	0.042	15,142,234	28,573
DEUTSCHE MORGAN GRENPELL SEC SYDNEY	96,500	0.038	1,204,899	3,626
DLJ INTL SECS LONDON	520,930	0.034	10,623,476	17,852
DONALDSON LUFKIN & JENRETTE NEW YORK	137,200	0.050	5,012,472	6,860
DONALDSON LUFKIN & JENRETTE SEC JERSEY	5,000	0.041	129,954	206
DONALDSON LUFKIN & JENRETTE SECS LONDON	21,600	0.026	373,896	557
DONALDSON LUFKIN HONG KONG	26,000	0.034	307,488	878
DRESDNER KLEINWORT BENSON ASIA LTD TOKYO	1,051,800	0.011	10,539,483	11,363
DRESDNER KLEINWORT BENSON NEW YORK	1,000	0.050	61,493	50
DRESDNER KLEINWORT BENSON(GBL CUST ONLY)	244,550	0.076	9,949,824	18,632
EXANE PARIS	30,000	0.240	3,599,802	7,185
FLEMING MARTIN LONDON	37,300	0.010	248,447	373
FLEMING NEW YORK	3,787,210	0.011	16,796,423	42,156
FOX-PITT	1,975	0.047	61,858	93
FRANK RUSSELL SECS INC NEW YORK	75,000	0.059	1,811,150	4,400
G K GOH STOCKBROKERS PTE LTD SINGAPORE	26,000	0.048	446,193	1,250
GOLDMAN SACHS & CO NY	4,913,738	0.028	55,488,836	135,892
GOLDMAN SACHS HONG KONG	419,500	0.019	3,174,846	8,113
GOLDMAN SACHS INTERNATIONAL NY	117,600	0.050	3,580,920	5,880
GOLDMAN SACHS JAPAN LTD TOKYO	227,008	0.046	12,941,990	10,478
GOLDMAN SACHS LONDON	3,077,101	0.028	57,378,700	85,010
GOODBODY STOCKBROKERS DUBLIN	91,600	0.022	1,005,609	1,987
HENDERSON CROSTWAITE LONDON	51,500	0.010	343,852	512
HG ASIA CLEARING SVCS LTD KULALA LUMPER	95,000	0.021	804,085	2,018
HSBC INV BK PLC LONDON	177,495	0.042	6,543,442	7,485
HSBC JAMES CAPEL NEW YORK	1,855,537	0.019	22,500,072	35,095
INDOSUEZ CAP SECS LONDON	15,300	0.047	287,861	721
INDOSUEZ WI CARR LONDON	364,983	0.028	4,033,839	10,110
INDOSUEZ WI CARR SECS HONG KONG LTD	378,500	0.024	3,597,060	8,958
ING AMSTERDAM	200	0.335	26,773	67
ING BANK LONDON	1,700	0.065	44,152	110
ING BARING FURMAN SELZ NEW YORK	51,000	0.036	1,847,833	1,813
ING BARING SECS JAPAN LTD TOKYO	30,850	0.033	807,693	1,025
ING BARING SINGAPORE	300,000	0.033	3,083,467	10,030
ING BARINGS INTL NEW YORK	119,000	0.051	4,304,727	6,035
ING BARINGS SECS HK LTD HONG KONG	5,000	0.129	643,498	644
INVESTMENT TECHNOLOGY GROUPS NEW YORK	14,100	0.020	1,447,324	282
J B WERE SON & SON LTD MELBOURNE	235,000	0.014	1,313,017	3,370
J P MORGAN SECS LONDON	580,015	0.049	13,811,731	28,310
JAMES CAPEL ASIA LTD HONG KONG	28,000	0.012	133,396	332
JAMES CAPEL AUSTRALIA	80,100	0.008	220,632	665
JAMES CAPEL LONDON	2,060,307	0.026	37,764,924	52,660
JAMES CAPEL NY	245,981	0.017	2,360,788	4,104

Broker Name	No. of Shares	Commission per Share	Total Dollar Amount of Trades	Commission
JAMES CAPEL PACIFIC LTD TOKYO	163,195	0.018	3,176,681	2,871
JARDINE FLEMING HONG KONG	212,000	0.021	1,633,358	4,388
JARDINE FLEMING SECS TOKYO	190,802	0.095	17,581,771	18,053
KLEINWORT BENSON LTD LONDON	1,102,754	0.029	20,946,940	31,658
LEHMAN BROS INC NEW YORK	195,555	0.031	3,613,155	6,156
LEHMAN BROS INTL NEW YORK	57,750	0.201	6,633,279	11,634
LEHMAN BROS JAPAN TOKYO	156,149	0.034	11,462,310	5,304
LEHMAN BROS LONDON	439,460	0.030	7,933,005	13,247
LEHMAN BROS SECS ASIA LTD HONG KONG	298,000	0.006	750,416	1,883
LEWCO SECS CORP NEW YORK	820,245	0.006	2,622,146	4,558
MACQUARIE INVT MGMT LTD SYDNEY	928,630	0.009	2,728,568	8,199
MERRILL LYNCH FAR EAST LTD HONG KONG	73,500	0.012	366,433	913
MERRILL LYNCH INTL LTD. LONDON	1,917,701	0.029	29,996,578	54,720
MERRILL LYNCH JAPAN INCJPN	1,137,306	0.024	34,710,389	27,357
MERRILL LYNCH NY	137,200	0.041	3,216,769	5,562
MERRILL LYNCH PIERCE FENNER SMITH INC NY	8,710,338	0.023	105,435,393	198,029
MERRILL LYNCH SYDNEY	37,700	0.009	111,903	334
MORGAN GRENFELL LONDON	1,392,653	0.024	25,055,347	32,895
MORGAN J P SECS INC NEW YORK	2,435,332	0.046	53,789,699	111,296
MORGAN STANLEY & CO INC NY	5,404,392	0.015	45,625,813	82,264
MORGAN STANLEY ASIA LTD HONG KONG	18,000	0.012	84,572	211
MORGAN STANLEY INTL LONDON	2,605,471	0.040	74,007,882	104,559
MORGAN STANLEY JAPAN LTD TOKYO	890,845	0.016	17,611,282	14,638
MORGAN STANLEY NY	39,000	0.023	359,561	895
NBC CLEARING SVCS INC (T098NBCS)	2,000	0.042	56,611	83
NESBITT BURNS TORONTO (T009NTDT)	388,700	0.041	9,682,425	15,802
NOMURA SECS INTL INC NEW YORK	2,440,000	0.004	9,211,673	9,217
NOMURA SECURITIES CO TOKYO	1,055,602	0.013	14,931,675	14,043
OPPENHEIMER & CO INC NEW YORK	7,300	0.050	940,096	365
ORD MINNETT MELBOURNE	171,600	0.014	798,284	2,399
ORD MINNETT SYDNEY	43,850	0.023	511,019	1,025
PARIBAS CORP NY	32,243	0.218	2,813,342	7,016
POTTER WARBURG SEC	95,700	0.019	603,347	1,818
RBC DOMINION SECS CORP NEW YORK	40,000	0.042	927,511	1,660
ROBERT FLEMING INC NEW YORK	1,272,290	0.012	6,066,199	15,189
ROBERT FLEMING LONDON	606,008	0.011	4,474,146	6,713
ROCHDALE SECURITIES CORP	84,900	0.040	6,881,824	3,396
S G WARBURG SECS (JAPAN) INC TOKYO	785,200	0.022	14,793,605	17,498
SALOMON BROS ASIA LTD HONG KONG	815,000	0.010	3,241,793	8,167
SALOMON BROS INC NEW YORK	1,640,970	0.026	25,634,138	43,162
SALOMON BROS INTL LTD LONDON	1,005,511	0.035	20,624,041	34,920
SALOMON BROS SINGAPORE	4,000	0.119	67,348	476
SALOMON BROS TOKYO	1,594,007	0.016	23,763,683	26,086
SALOMON SMITH BARNEY SYDNEY	360,000	0.023	2,848,616	8,263
SBC WARBURG AUSTRALIA MELBOURNE	556,500	0.016	3,184,612	8,970
SBC WARBURG DILLON READ ASIA HONG KONG	139,500	0.029	1,567,369	4,072
SBC WARBURG LONDON	1,152,745	0.056	30,122,627	65,068
SCANDINAVIAN BK GROUP PLC LONDON	35,400	0.038	554,411	1,329
SCHRODER SECS (JAPAN) LTD TOKYO	117,500	0.044	4,236,064	5,112
SCHRODER SECS LONDON	95,450	0.020	1,255,668	1,883
SCHRODER WERTHEIM & CO INC NEW YORK	679,755	0.006	2,200,190	3,825
SCHROEDER SECS LTD LONDON	931,623	0.023	12,608,343	21,455

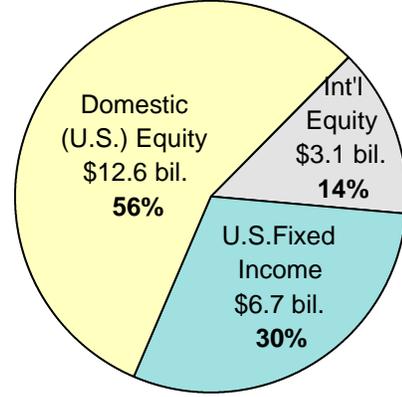
Broker Name	No. of Shares	Commission per Share	Total Dollar Amount of Trades	Commission
SCOTIA MCLEOD (USA) INC NEW YORK	79,300	0.040	1,882,568	3,211
SG COWEN SECS CORP NEW YORK	169,573	0.040	4,267,716	6,783
SG SECURITIES SINGAPORE	100,000	0.045	1,274,745	4,479
SMITH BARNEY INC NEW YORK	115,100	0.050	4,146,451	5,755
SOCIETE GENERALE SECS CORP NEW YORK	334,711	0.006	1,096,782	1,907
SOCIETE GENERALE STRAUSS LONDON	22,000	0.015	219,812	330
SVENSKA INTERNATIONAL LONDON	119,000	0.120	5,792,377	14,274
TORONTO DOMINION	14,800	0.040	368,017	592
UBS AG LONDON	29,267	0.047	910,614	1,368
UBS BUNTING WARBURG INC TOR (T015BWT)	81,400	0.041	2,044,732	3,367
UBS SECURITIES LTD TOKYO	72,900	0.018	2,493,688	1,288
UNION BANK OF SWITZERLAND HONG KONG	43,100	0.054	1,638,489	2,310
UNION BANK OF SWITZERLAND TOKYO	66,600	0.082	3,664,874	5,494
UNION BANK SWITZERLAND SECS LONDON	2,273,531	0.014	21,819,166	32,179
W I CARR SINGAPORE	11,000	0.120	186,500	1,319
WARBURG DILLON READ (ASIA) LTD H K	625,733	0.031	12,401,107	19,401
WARBURG DILLON READ (ASIA) LTD LONDON	46,444	0.071	3,091,260	3,282
WARBURG DILLON READ AUST EQ LTD MELBOUR	52,150	0.020	519,813	1,043
WARBURG DILLON READ AUSTRALIA LTDSYDNEY	69,650	0.021	992,171	1,493
WARBURG DILLON READ LLC NEW YORK	1,260,403	0.024	24,362,777	30,513
WARBURG DILLON READ LONDON	338,550	0.014	3,052,618	4,586
WARBURG DILLON READ MELBOURNE	88,913	0.021	942,500	1,892
WARBURG SECS LONDON	127,345	0.041	2,349,321	5,251
WESTLB PANMURE LONDON	<u>2,500</u>	<u>0.044</u>	<u>44,291</u>	<u>111</u>
<b>TOTAL</b>	<b><u>\$93,040,857</u></b>	<b><u>\$ 18.158</u></b>	<b><u>\$1,400,349,614</u></b>	<b><u>\$ 2,320,482</u></b>

# INVESTMENT ALLOCATION

**June 30, 2000**



**June 30, 1999**



## Rates of Return

1976-77	8.74%	1982-83	49.30%	1988-89	14.33%	1994-95	17.78%
1977-78	1.18%	1983-84	(5.20)%	1989-90	9.52%	1995-96	16.70%
1978-79	8.62%	1984-85	32.10%	1990-91	7.99%	1996-97	20.60%
1979-80	9.54%	1985-86	31.50%	1991-92	14.62%	1997-98	21.30%
1980-81	4.95%	1986-87	11.80%	1992-93	16.74%	1998-99	16.80%
1981-82	2.40%	1987-88	3.10%	1993-94	1.89%	1999-00	10.00%

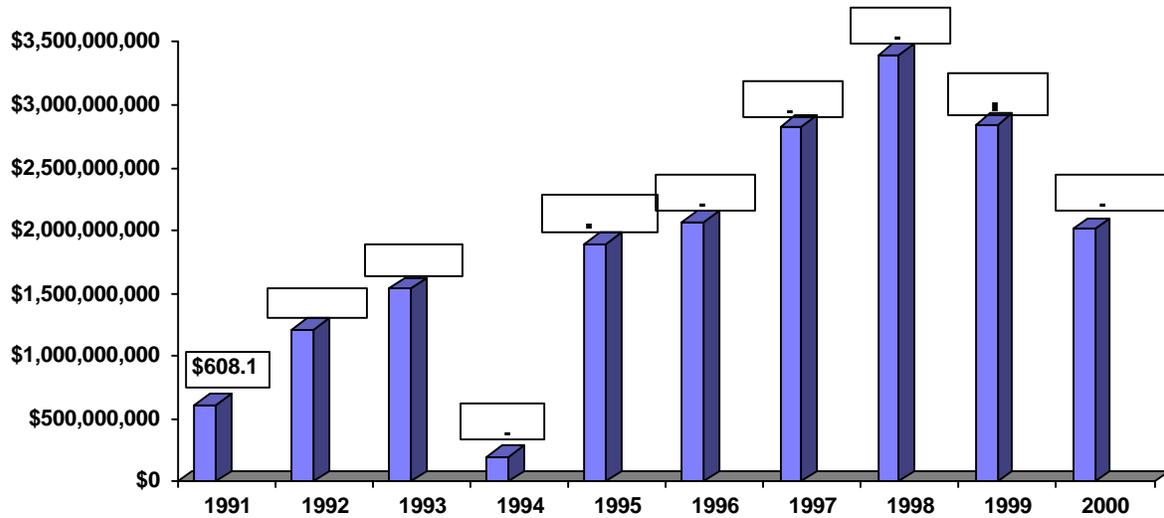
### *Annualized*

	<b>1 Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>
ASRS	10.0%	15.9%	17.0%	14.3%
S&P 500	7.3	19.7	23.8	17.8
Lehman Agg.	4.6	6.0	6.2	7.8
EAFE	17.4	10.5	11.6	8.1

# ARIZONA STATE RETIREMENT SYSTEM

## NET INCOME FROM INVESTMENTS\*

(in millions)

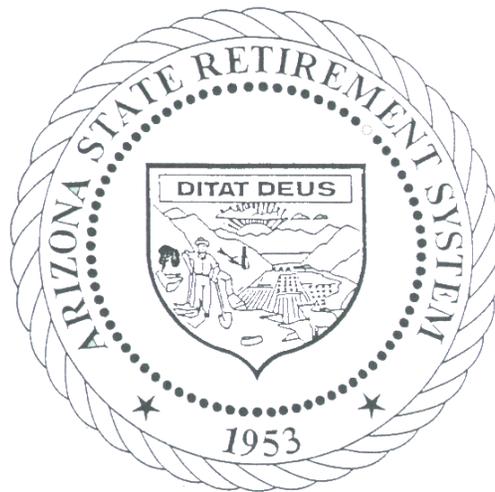


### Year Ended June 30 Ten Year Review of Investment Income (All figures rounded to nearest \$1,000)

Fiscal Year	Investment Income	Market Appreciation	Investment Expenses	Net Income* from Investments
1990-91	\$ 484,435,000	\$ 131,741,000	\$ 8,047,000	\$ 608,129,000
1991-92	495,404,000	722,863,000	9,277,000	1,208,990,000
1992-93	497,409,000	1,052,531,000	16,555,000	1,533,385,000
1993-94	477,384,000	(265,397,000)	14,703,000	197,284,000
1994-95	509,614,000	1,401,325,000	15,257,000	1,895,682,000
1995-96	523,566,000	1,562,575,000	22,990,000	2,063,151,000
1996-97	566,750,000	2,282,015,000	22,264,000	2,826,501,000
1997-98	325,329,000	3,094,012,000	22,377,000	3,396,964,000
1998-99	394,337,000	2,474,779,000	26,215,000	2,842,901,000
1999-00	416,594,000	1,625,595,000	28,273,000	2,013,916,000

\*Net income has been restated to reflect unrealized gains and losses.

# ACTUARIAL SECTION



# ARIZONA STATE RETIREMENT SYSTEM

## COMPREHENSIVE ANNUAL FINANCIAL REPORT INDEX – ACTUARIAL SECTION

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April 14, 2000

## ARIZONA STATE RETIREMENT PLAN

### Actuarial Certification Statement

This is to certify that Watson Wyatt Worldwide has prepared an actuarial valuation of the Arizona State Retirement Plan as of June 30, 1999.

Actuarial calculations have been made with respect to a total of 305,064 members, comprised of 176,368 active employees, 69,912 inactive members, and 55,104 retired members and beneficiaries (including 3,680 disabled retirees). In addition, there are 987 ASRS retirees receiving ad hoc benefits from Plan assets.

The actuarial calculations establish a total benefit cost of 5.46 percent of the annual compensation of employees. The total normal cost rate is 10.95 percent of compensation, and the required amortization payment determined in accordance with Section 38-737 is -5.49 percent of compensation.

The actuarial cost factors as of June 30, 1999 are as follows:

Actuarial accrued liabilities:

Liabilities due to members' benefits:	
Active members:	
Retirement benefits	\$ 6,734,246,600
Health insurance premium supplement	409,278,200
Disability deferred retirement benefits	134,140,800
Pre-retirement death benefits	202,624,519
Withdrawal benefits	<u>402,682,639</u>
Total active members	7,882,972,758
Inactive members	563,122,532
Retired members and beneficiaries	6,295,486,360
Disabled members (deferred retirement)	149,290,500
Benefit increases for other-than-plan participants	<u>9,312,935</u>
Total present value of benefits	14,900,185,085
Reserve for future PBI COLAs	<u>1,221,714,444</u>
Total actuarial accrued liability	16,121,899,529
Actuarial value of assets	<u>18,760,959,854</u>
Unfunded actuarial accrued liability	<u>\$ (2,639,060,325)</u>
Amortization of unfunded actuarial accrued liability	\$ (301,287,555)
Normal cost for the year	<u>601,154,219</u>
Total contribution for the year	<u>\$ 299,866,664</u>
Total covered payroll (projected to 1999/2000 plan year)	<u>\$ 5,487,933,600</u>

	<b>401(a) Account</b>	<b>401(h) Account</b>	<b>Total</b>
Total contribution for fiscal years 1999-2000 and 2000/2001 as a percentage of covered payroll:			
Employee portion	2.17 %		2.17 %
Employer portion	<u>1.25 %</u>	<u>0.92 %</u>	<u>2.17 %</u>
Total	3.42 %	0.92 %	4.34 %

The assumptions applied in the actuarial valuation were adopted November 15, 1996 by Board action, to be effective for valuations on and after June 30, 1996. These assumptions are as follows:

1. Investment yield – 8 percent per annum.
2. Salary increases

<b>Year of Service</b>	<b>Merit Component</b>	<b>Total Salary Increase</b>
1	5.00 percent	9.50 percent
2	4.00	8.50
3	2.50	7.00
4	1.80	6.30
5	1.40	5.90
6	1.25	5.75
7	1.00	5.50
8	0.80	5.30
9	0.75	5.25
10	0.50	5.00
11 to 19	0.25	4.75
20 or more	0.00	4.50

3. Rates of disability

<b>Age</b>	<b>Males</b>	<b>Females</b>
22	0.08 percent	0.10 percent
32	0.11	0.16
42	0.20	0.31
52	0.66	0.72
62	1.67	1.25

4. Rates of withdrawal – Sample ages and years of service

Age	Male Members Years of Service				
	1	2	5	8	10+
22	33.24%	25.31%	12.68%	6.60%	11.04%
32	18.87	14.03	8.76	4.80	4.67
42	16.93	9.82	6.24	3.80	2.01
52	16.18	8.54	4.43	3.10	1.38
62	19.05	10.18	3.73	2.50	1.10

Age	Female Members Years of Service				
	1	2	5	8	10+
22	26.86%	23.58%	18.08%	12.31%	18.04%
32	18.51	15.39	9.69	7.30	6.47
42	16.44	11.05	6.20	4.14	2.08
52	14.31	9.09	5.05	2.68	1.52
62	14.57	9.71	4.65	2.41	0.83

5. Rates of retirement – Sample ages and years of service

Age	Years of Service				
	10-14	20	25	30	35+
50	5.00%	5.00%	5.00%	10.00%	12.50%
55	5.00	6.00	16.25	18.75	12.50
60	9.00	26.25	25.00	30.00	30.00
62	34.00	42.00	44.00	50.00	50.00
65	55.00	55.00	60.00	60.00	60.00
66 and above	55.00	60.00	60.00	60.00	60.00

6. Mortality rates – 1983 Group Annuity Mortality Table (with margins, set back one year for males and with no setback for females).

7. Mortality rates after disability – Post disablement mortality rates are based on experience of other large public sector systems, grading into post-retirement mortality rates at age 83.

8. Valuation assets – Market value less five-year phase-in of Excess (Shortfall) Investment income.

9. Funding method – Projected unit-credit.

\* The actuarial calculations have been performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the Retirement Plan and on the actuarial assumptions adopted by the Retirement Board.

W. Michael Carter, FSA, MAAA, EA, Actuary

April 14, 2000

Retirement Board  
Arizona State Retirement System  
3300 North Central Avenue  
14th Floor  
Phoenix, Arizona 85012

Dear Retirement Board Members:

### **Actuarial Valuation as of June 30, 1999**

We certify that the information contained in the 1999 actuarial valuation report is accurate and fairly presents the actual position of the Arizona State Retirement Plan (the Plan) as of June 30, 1999.

All calculations have been made in conformity with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, the results presented comply with the requirements of the Arizona statutes and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board. The undersigned is an independent actuary. He is an Enrolled Actuary and a Member of the American Academy of Actuaries, and is experienced in performing valuations for large public retirement systems.

### **Actuarial Valuations**

The primary purpose of the valuation report is to determine the required employee and employer contribution rates, to describe the current financial condition of the Plan, and to analyze changes in the Plan's condition. In addition, the report provides information required by ASRS in connection with Governmental Accounting Standards Board Statement No. 25 (GASB No. 25), and it provides various summaries of the data. Since the contribution rate is set for a two-year period each even numbered valuation year, the contribution rate determined by the 1999 valuation is a hypothetical rate that will never actually be contributed to the Plan. However, it is a useful tool for analyzing the changes that have occurred in the Plan from the prior valuation.

Valuations are prepared annually, as of June 30th of each year, the last day of the Plan's year and ASRS' fiscal year.

### **Financing Objectives**

The member contribution rate and the employer contribution rate are calculated by the actuarial valuation. The calculated rates are applicable for the two plan years beginning July 1 of the calendar year that begins after the valuation date of even numbered years. The state and employer contributions, when combined with the contributions made by members, are intended to provide for the normal cost and to amortize the Unfunded Actuarial Accrued Liability (UAAL). The rate that will be contributed for the fiscal year beginning July 1, 2000 was determined by the 1998 valuation and is 2.17 percent of pay.

## **Progress Toward Realization of Financing Objectives**

The actual contribution rate for the fiscal years 1999/2000 and 2000/2001 is 2.17 percent of compensation as determined by the 1998 valuation. Based on this actuarial valuation as of June 30, 1999, the hypothetical matching employee and employer contribution rates would be 2.73 percent for the fiscal year 2000/2001. This rate does not include the contribution to the LTD program. This hypothetical rate would have provided for the normal cost and would have amortized the UAAL over the required 14 years from June 30, 1999. Employees and employers contributed the recommended rate for the 1998/1999 fiscal year and are contributing the recommended rate for the 1999/2000 fiscal year. It is expected that they will continue to contribute the recommended rates as determined by this actuarial valuation. Therefore, all financing objectives are being realized.

Section 38-737 specifies that the unfunded actuarial accrued liability is amortized over a rolling 30-year period. This change is being phased-in over the next 14 years.

## **Benefit Provisions**

The 1999 Legislature enacted several benefit enhancements to the ASRS statutes. These enhancements included the following items:

- Enhanced refund option for members who terminate employment prior to eligibility for a retirement benefit. Members may elect a refund option which will pay them not only their employee contributions with interest, but also a percentage of the employer contributions with interest contributed on their behalf. The percentage is 50 percent for members with five years of service and increases 10 percent for each additional year of service up to a maximum of 100 percent.
- Increase in the benefit multiplier from 2.0 percent of pay for each year of service to 2.1 percent effective July 1, 2000.
- A 5 percent ad hoc increase for retirees effective July 1, 2000.
- Lowering the 9 percent benchmark for determining excess investment income to the actuarially assumed rate of return of 8 percent, thereby increasing the amount of assets set aside for the Permanent Benefit Increase (PBI).
- Increasing the maximum aggregate PBI COLA from 3 percent to 4 percent. In addition, the limitation on the aggregate COLA equal to the increase in the prior calendar year CPI has been removed.
- The maximum number of years that can be accrued by a participant in the LTD program was increased from 25 to 30 years.

See Table 18 of this report for more details on the benefit provisions.

## **Assumptions and Methods**

The actuarial assumptions were adopted on November 15, 1996 by the Board, to be effective as of June 30, 1996, as recommended by the actuary. Further detail on the assumptions and methods may be found in Table 18 of this report and in the Experience Study report dated November 15, 1996. The assumptions are internally consistent and are reasonably based on the actual experience of the Plan. These assumptions are in full compliance with all parameters established by GASB No. 25.

**Data**

Member data for retired, active and inactive participants was supplied as of June 30, 1999, by the ASRS staff. We have not subjected this data to any auditing procedures, but have examined the data for reasonableness and consistency with the prior year's data. Asset information was supplied by the ASRS staff.

We look forward to discussing this report with you at your convenience.

Sincerely,

W. Michael Carter, FS.A, MAAA, EA  
Vice President

Lewis Ward  
Consultant

# ARIZONA STATE RETIREMENT PLAN

## GENERAL ACTUARIAL INFORMATION

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The following charts will serve to indicate some of the more important statistics regarding the retirement program; each chart will identify each membership category separately where possible. All figures are as of July 1, 1999.

<b>Non-Retired Members</b>	<b>State Employees</b>	<b>Teachers</b>	<b>Political Subdivision Employees</b>	<b>Total</b>
Number of members (active)	42,641	57,653	76,074	176,368
Average age	43.7	43.4	43.4	43.5
Average years of service	8.0	10.3	6.9	8.4
Average annual salary	\$30,316	\$33,970	\$25,257	\$29,329

<b>Retired Members – Plan</b>	<b>State Employees</b>	<b>Teachers</b>	<b>Political Subdivision Employees</b>	<b>Total</b>
Number of retirees	15,049	18,661	21,394	55,104
Average age	71.5	69.0	71.3	70.6
Average monthly benefit	\$926	\$1,431	\$738	\$1,024
Average years of service	16.8	22.4	15.6	18.2

<b>Retired Members – System</b>	<b>State Employees</b>	<b>Teachers</b>	<b>Political Subdivision Employees</b>	<b>Total</b>
Number of retirees	682	561	460	1,703
Average age	73.6	76.8	77.8	75.8
Average monthly benefit	\$1,630	\$514	\$446	\$942
Average years of service	14.4	10.5	10.2	12.0

Of all plan and system retirees at July 1, 1999, 2.44 percent received annuities of less than \$100 per month, 7.03 percent received from \$100 to \$199 per month; 8.85 percent received from \$200 to \$299 per month; 7.81 percent received from \$300 to \$399 per month; 8.73 percent received from \$400 to \$499 per month; 6.33 percent received from \$500 to \$599 per month; 6.73 percent received from \$600 to \$699 per month; 15.20 percent received from \$700 to \$999 per month; 36.9 percent received \$1,000 or more per month.

Of all retirees, 25.8 percent are under age 65; 21.2 percent are age 65-69; 19.4 percent are age 70-74; 16.1 percent are age 75-79; 17.5 percent are age 80 or older.

One of the most critical factors bearing on retirement costs is that of changes in the average salary level of active participants. The following chart will show, for five fiscal years (fiscal year ending 1998/99), the average salary level for state employees, for teachers, and for political subdivision employees other than teachers, and the average for all groups combined.

	<b>Year Ending June 30,</b>				
	<b>1994-95</b>	<b>1995-96</b>	<b>1996-97</b>	<b>1997-98</b>	<b>1998-99</b>
State employees	\$ 26,454	\$ 26,909	\$ 27,463	\$ 29,027	\$ 30,316
Teachers	31,982	32,458	33,136	33,995	33,970
Political subdivision employees	22,813	23,685	23,699	24,050	25,257
All groups	26,746	27,368	27,695	28,457	29,329

# ARIZONA STATE RETIREMENT PLAN

## FINANCING OBJECTIVE

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The financing objective of the Arizona State Retirement Plan is to maintain a funding ratio of 100 percent, as measured by the ratio of Retirement Plan actuarial assets to actuarial liabilities. As of June 30, 1999, the date of the most recent actuarial valuation, this funding level is 116.4 percent. The actuarial surplus, that is the difference between actuarial assets and liabilities, was \$2,530,119,880.

A statutory change effective in 1998 requires that an actuarial valuation be performed only following even-numbered years, rather than annually. This biannual valuation recommends contribution rates for a two-year period. The contribution rates recommended in the valuation for the fiscal year ended June 30, 1998 will remain in effect through the fiscal year that ends June 30, 2001. These rates are described below.

### Normal Costs and Required Contribution Rates

The Plan's normal cost for FY 1999 – 2000 is 10.95 percent and for FY 1998 –1999 was 10.47 percent. The normal cost represents the present value cost, expressed as a percentage of pay, of the current level of benefits provided by the Plan. The Plan has a negative unfunded actuarial accrued liability (an actuarial surplus), which is treated as a credit on the Plan's required contribution rate. Because of the actuarial surplus, the required contribution rate is lower than the normal cost. If the actuarial value of assets and liabilities was equal, the required contribution rate would be the same as the normal cost. Because assets exceed liabilities, the required contribution rate is lower than the normal cost.

Pursuant to Arizona statute, the ASRS consulting actuary recommends a contribution rate that will result in a funding level of 100 percent at the end of the actuarial funding period. The actual contribution rate (including long-term disability (LTD)) for FY 2000 and 2001 is 2.66 percent of pay (2.17 percent pension and health insurance, 0.49 percent LTD). This rate was determined by the 1998 valuation. Both employee and employer members contribute this rate.

Components of the normal cost are as follows:

Retirement benefits	8.76 %
Health insurance premium supplement	0.47
Survivor benefits	0.29
Withdrawals	0.66
Long-term disability benefit	<u>0.29</u>
Total, normal cost	10.47
Amortization of the UAAL	<u>(6.13)</u>
Required contribution rate for FY 2000/1999	4.34 %
Shared by employee and employer	<u>÷ 2</u>
Required matching contribution rate	<u>2.17 %</u>

### Asset Valuation

The methodology used by the ASRS consulting actuary to value assets phases in gains and losses over a five-year period. This results in a "smoothing" effect, minimizing year-to-year volatility in the contribution rate. By deferring some investment gains, the asset valuation methodology also results in some unrealized investment gains.

As of June 30, 1999, the actuarial value of assets was \$18.76 billion, and the market value was \$21.84 billion. The difference of \$3.08 billion between the actuarial and market values represents net investment gains. These gains will be realized actuarially over subsequent years.

### **Long-Term Disability Benefit**

In addition to pension, health insurance, and survivor benefits, the ASRS also offers a long-term disability benefit. The financing objective of the long-term disability (LTD) program is to achieve a funding level of 100 percent by the end of 2010.

Effective October 1, 1995, to comply with Internal Revenue Code requirements, liabilities associated with the long-term disability benefit were separated from the Plan. Because no assets were transferred to the new LTD fund, the required contribution rate contains two components: 1) to fund current liabilities, and 2) to amortize the liabilities transferred from the Plan in 1995.

The LTD contribution rate for fiscal year 2000 and fiscal year 1999 is 0.98 percent, shared equally by employees and employers. Of this amount, 0.66 percent funds current liabilities, and 0.32 percent amortizes the liabilities transferred from the Plan in 1995. The program's liabilities are scheduled to be amortized each twelve-month period through fiscal year 2010.

As of June 30, 2000, 1999 and 1998, LTD assets were \$87.7, \$69.3 and \$55.6 million, respectively. This represents an increase of \$18.4 for fiscal year 2000 and \$13.7 for fiscal year 1999.

# ARIZONA STATE RETIREMENT PLAN

## SUMMARY OF THE BENEFIT PROVISIONS OF THE RETIREMENT PLAN – TABLE 18 ACTUARIAL VALUATION, JUNE 30, 1999

The Arizona State Retirement Plan makes provision for the retirement, disability, and death and survivor benefits to all employees of the State, instrumentalities of the State and certain political subdivisions. The major provisions of the Plan may be summarized as follows:

### A. RETIREMENT BENEFITS

#### 1. *Normal Retirement Date (the earliest of the following)*

- (a) an employee's 65th birthday,
- (b) an employee's 62nd birthday and completion of at least 10 years of credited service, or
- (c) the first day that the sum of an employee's age and his years of total credited service equal 80.

#### 2. *Monthly Life Annuity*

The product of 2 percent of the participant's best 36-month average compensation (in last 120 months) multiplied by his or her years of total credited service.

#### 3. *Normal Retirement Benefits*

The sum of the monthly life annuity and any prior service benefits to which the employee was entitled under the ASRS.

#### 4. *Early Retirement*

Age 50 with 5 or more years of credited service.

#### 5. *Early Retirement Benefits*

If not eligible for normal retirement and at least age 50 with 5 years of total credited service, normal retirement benefit earned to the date of retirement, reduced according to the following table:

		AGE AT DATE OF RETIREMENT															
YEARS OF SERVICE		50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65
10 – 25	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%	88%	91%	94%	97%	100%	
25 OR MORE	44%	49%	54%	59%	64%	69%	74%	79%	84%	89%	94%	97%	100%	100%	100%	100%	100%
	50%	55%	60%	65%	70%	75%	80%	85%	90%	95%	100%	100%	100%	100%	100%	100%	100%

Provided, however, that if the employee meets the Rule of 77 (but not the Rule of 80), the reduction will be 3 percent for each unit below 80.

# ARIZONA STATE RETIREMENT PLAN

TABLE 18 (CONTINUED)

## 1983 Group Annuity Mortality Table

Age	Rates of Mortality (Active)	
	Male Participants	Female Participants
20	.000365	.000189
25	.000444	.000253
30	.000572	.000342
35	.000785	.000476
40	.001128	.000665
45	.001932	.001010
50	.003513	.001647
55	.005660	.002541
60	.008384	.004241
65	.013868	.007064
70	.019296	.012385

### 6. *Normal Form of Benefit*

Straight life annuity payable monthly with benefits commencing on the day following the date of termination of employment.

### 7. *Optional Forms*

- Joint and contingent annuity (with Pop-up) with either 100 percent, 66-2/3 percent or 50 percent of the reduced retirement income payable for the life of the contingent annuitant upon the death of the retiring participant,
- Period certain and life annuity with either five or ten years of payments guaranteed, or
- A social security leveling option combined with any of the other forms of payment.

### 8. *Minimum Benefit*

The minimum monthly benefit payable to a retired member who is at least age 75 and who has 20 or more years of service is \$600.

## B. **DISABILITY BENEFITS (for disability after June 30, 1988)**

### 1. *Long-Term Disability*

Monthly benefit equal to two-thirds of monthly compensation, reduced by any social security disability or workers' compensation benefits, payable commencing six months after date of disability until the earlier of:

- Date of cessation of total disability, or
- Normal retirement date.

This benefit is paid by a separate LTD plan.

# ARIZONA STATE RETIREMENT PLAN

TABLE 18 (CONTINUED)

2. *Disability Payments if Participant Remains Disabled Through Normal Retirement Date*

Monthly benefit participant would have received if service had continued to normal retirement date assuming the participant's salary remained at the level it was at his or her date of disability, also provided that the amount of total credited service is limited to 25 years unless he or she had more than 25 years at date of disability.

3. *The minimum monthly benefit payable to a disabled participant is \$50.00.*

C. **DISABILITY BENEFITS (for disability before July 1, 1988)**

1. *Eligibility*

Age 50 with 5 years of service.

2. *Benefit Amount*

A life annuity which can be provided by the employee's contribution account. Disability payments after normal or early retirement eligibility are reduced by the actuarial value of the disability payments made up to the date of normal or early retirement eligibility.

D. **PRE-RETIREMENT DEATH BENEFITS**

1. *Eligibility*

Applicable if death occurs prior to retirement.

2. *Benefit*

Any one of the following, at the option of the beneficiary:

(a) A lump sum equal to the sum of (i) and (ii):

(i) two times participant's contributions to the plan, with interest, and

(ii) the amount of the participant's employee and employer accounts, along with supplemental credits, if any, transferred from the ASRS to the Plan, with interest

(b) If (a) is greater than \$5,000, the beneficiary may elect to receive a monthly income for five or ten years certain and life thereafter which is actuarially equivalent to the amount in (a).

3. *Death of an Active Participant After 15 Years of Credited Service or After Eligibility for Early Retirement*

Beneficiary receives a benefit in the form of a survivor annuity equal to the present value of the benefit that would have been payable to the beneficiary if the participant had retired on the date of his or her death and elected to receive an annuity payable in the form of joint and 100 percent survivor with the beneficiary named as the joint pensioner.

# ARIZONA STATE RETIREMENT PLAN

TABLE 18 (CONTINUED)

## E. VESTING OF BENEFITS

1. **Vesting** – A participant is fully vested in his or her accrued benefit.
2. **Benefits upon Vesting** – A fully vested participant is entitled to either:
  - (a) return of contributions with interest, or
  - (b) the retirement benefit payable at normal retirement earned to the date of participant's termination.

## F. RETIREE HEALTH INSURANCE PREMIUM SUPPLEMENT

### 1. Eligibility

Retirement or disability after 5 years of credited service and covered by an employer-sponsored group insurance program for which the retired or disabled member must pay part of the cost.

### 2. Benefit

The benefit is payable only with respect to allowable health insurance premiums for which the participant is responsible. The maximum benefits for participants with 10 or more years of service are:

- (a) with respect to premiums paid for the retiree's own coverage:
  - \$95 per month if the retiree is under age 65
  - \$65 per month if the retiree is 65 or over
- (b) with respect to premiums paid for the retiree's dependent coverage:
  - \$80 per month if the dependent is under age 65
  - \$50 per month if the dependent is 65 or over
- (c) with respect to premiums paid for family coverage:
  - \$175 per month for the member and one or more dependents not Medicare eligible
  - \$115 per month for the member and one or more dependents Medicare eligible
  - \$145 per month for the member not Medicare eligible and one or more dependents Medicare eligible
  - \$145 per month for the member Medicare eligible and one or more dependents not Medicare eligible

# ARIZONA STATE RETIREMENT PLAN

TABLE 18 (CONTINUED)

For employees with five to nine years of service the benefits are the same dollar amounts as above multiplied by a vesting fraction equal to 10 percent for each completed year of service (i.e., 50 percent to 90 percent).

Any unused supplement of the member or dependent may be used to pay the premiums of the other recipient.

## G. AUTOMATIC COST OF LIVING ADJUSTMENT BASED ON EXCESS INVESTMENT EARNINGS

Retirees who have been retired as of July 31 of the previous year and LTD members receiving benefits prior to July 1, 1995 are eligible for a COLA up to a maximum of 4 percent. The COLA is paid from a reserve of "Excess Investment Earnings." If there are no "Excess Investment Earnings" in reserve then no COLA is paid.

## H. EMPLOYEE AND EMPLOYER CONTRIBUTIONS

The contribution rate for a plan year is based on the results of the actuarial valuation as of the last day of the plan year preceding the preceding plan year. Participants' contribution rate is equal to the required employer contribution rate. For the 1998/1999 plan year, the required contribution rate was 2.85 percent. For the 1999/2000 plan year, the required contribution rate is 2.17 percent.

## I. LEGISLATED PLAN CHANGES ENACTED BY THE 1989 LEGISLATURE OF THE STATE OF ARIZONA

### 1. *PUC Funding Method*

Beginning with the June 30, 1989 actuarial valuation, the total employee and employer contributions payable beginning July 1, 1990, shall be determined using the Projected Unit-Credit (PUC) funding method.

### 2. *\$12,000 Minimum Average Compensation for Current Retirees*

Recalculation of the retirement benefit for all plan members retired before June 30, 1989, who had 10 years of credited service using a minimum average compensation of one thousand dollars per month.

### 3. *2.0 percent Ad Hoc COLAs*

- Effective July 1, 1989, all members retired on or before June 30, 1988, shall receive a 2.0 percent permanent benefit increase to their December 31, 1988, base benefit.
- Effective July 1, 1990, all members retired on or before June 30, 1989, shall receive a 2.0 percent permanent benefit increase to their June 30, 1990, base benefit.

# ARIZONA STATE RETIREMENT PLAN

TABLE 18 (CONTINUED)

4. *Early Retirement Window*

During the period of May 15, 1989 through November 14, 1989, a member who is eligible for either Normal Retirement or Early Retirement with age plus credited service at least equal to 80, may retire and receive a benefit calculated using a 2.2 percent multiplier instead of 2.0 percent.

5. *3.0 percent Tax Equity Allowance*

Retroactive to the later of January 1, 1989, or the date payments commence, each member retiring on or before September 14, 1989, shall receive a tax equity benefit allowance consisting of a permanent increase of 3.0 percent in his or her January 1, 1989, base benefit.

J. **LEGISLATED PLAN CHANGES ENACTED BY THE 1990 LEGISLATURE OF THE STATE OF ARIZONA**

1. *Rule of 82*

Effective May 1, 1990, the number of points (sum of member's age and years of service) required to be eligible for normal retirement shall be reduced from 85 to 82. Also, the early retirement reduction factor for employees with 77 or more points but less than 82 points shall be 3 percent for each point or fraction thereof less than 82.

2. *3.0 percent Tax Equity Allowance*

Each member who retires between September 15, 1989, and September 14, 1990, shall receive a tax equity benefit allowance consisting of a permanent increase of 3.0 percent in his or her base benefit, retroactive to the date of retirement.

3. *Graded Vesting for Health Insurance Premium Supplement*

The Health Insurance Premium Supplement is extended to those qualifying members with between five and nine years of service. The member will be eligible to receive 10 percent of the benefit for each completed year of service (i.e., 50 percent to 90 percent).

K. **LEGISLATED PLAN CHANGES ENACTED BY THE 1991 LEGISLATION OF THE STATE OF ARIZONA**

1. *3.0 percent Tax Equity Allowance*

Each member who retires between September 15, 1990, and September 14, 1991, shall receive a tax equity benefit allowance consisting of a permanent increase of 3.0 percent in his or her base benefit, retroactive to the date of retirement.

2. *Recalculation of Retiree Benefits Using 2.0 percent Benefit Multiplier*

Each retired member with at least 10 years of service who retired prior to June 30, 1985, shall have his or her benefit recomputed. The recomputed benefit shall be equal to 2 percent times final average earnings times credited service plus an additional \$2 for each year of service. The retired member will receive the larger of the recalculated benefit or his/her current benefit. This increase is effective October 1, 1991.

# ARIZONA STATE RETIREMENT PLAN

TABLE 18 (CONTINUED)

3. *2.3 percent Ad Hoc Increase*

Effective July 1, 1991, all members retired on or before June 30, 1990, shall receive a 2.3 percent permanent benefit increase in their June 30, 1991, base benefit.

4. *Rule of 80*

Effective July 1, 1992, the number of points (sum of member's age and years of service) required to be eligible for normal retirement shall be reduced from 82 to 80. (For continuation purposes this legislation is not reflected until the 1993/94 fiscal year).

5. *Pop-up Option*

A pop-up option is added for retiring members who first participate in the Plan on or after December 31, 1991.

**L. LEGISLATED PLAN CHANGES ENACTED BY THE 1992 LEGISLATURE OF THE STATE OF ARIZONA**

1. *3.0 percent Tax Equity Allowance*

Each member who retired between September 15, 1991 and September 14, 1992, shall receive a tax equity benefit allowance consisting of a permanent increase of 3.0 percent in his or her base benefit, retroactive to the date of retirement.

2. *Minimum Retiree Benefit*

Each retiree of the Arizona State Retirement Plan who is at least age 75 on December 31, 1992, and who had at least ten years of service upon retirement from the plan shall be eligible for a minimum benefit. If the eligible retiree had at least ten years of service but less than fifteen years, his minimum benefit is \$350 a month. If the eligible retiree had at least fifteen years of service but less than twenty, his minimum benefit is \$500. If the eligible retiree had at least twenty years of service his minimum benefit is \$600. The minimum benefit shall be compared to the retiree's current benefit (including all ad hoc increases).

3. *5 percent Ad Hoc Increase*

Effective November 1, 1992, all members retired on or before October 31, 1992, shall receive a 5 percent permanent benefit increase in their October 31, 1992 benefit.

4. *Forfeited Service Repurchase*

Any present active member who has previously forfeited service has until December 31, 1994, to repurchase the forfeited service by paying the plan the employee and employer contributions (accumulated with interest) which would have been contributed during the members period of forfeited service.

# ARIZONA STATE RETIREMENT PLAN

TABLE 18 (CONTINUED)

5. *Repurchase of Service Due to Reduction in Force*

Any present active member who was terminated prior to December 31, 1992 as a result of a required reduction in force may purchase the credited service for the following period of unemployment if the member had five or more years of service at the time of termination and resumed employment with a participating employer within two years of termination. The cost of the repurchase is the total of the employee and employer contribution (accumulated with interest) which would have been contributed during the members period of unemployment.

6. *Change in Section 38-781.05 Funding Method*

Section 38-781.05 of the plan was amended so that the funding period for the plan would continue to be the period between the valuation and June 30, 2002 as long as the plan has a negative Unfunded Actuarial Accrued Liability. If the plan were to have a positive UAAL, then the old funding mechanism would apply.

**M. LEGISLATED PLAN CHANGES ENACTED BY THE 1993 LEGISLATURE OF THE STATE OF ARIZONA**

No benefit changes were passed by the 1993 Legislature. However, the Legislature passed legislation to reduce the required contribution rate of 4.09 percent down to 3.14 percent.

**N. LEGISLATED PLAN CHANGES ENACTED BY THE 1994 LEGISLATURE OF THE STATE OF ARIZONA**

1. *Minimum LTD Benefit*

Each member on long-term disability will receive a minimum monthly benefit of \$50.

2. *Minimum Retiree Benefit*

Each retiree of the Arizona State Retirement Plan who is at least age 75 and who had 20 or more years of service at retirement will receive a minimum monthly benefit of \$600.

3. *Pop-up Benefit*

Members who retired prior to January 1, 1992 and who elected a Joint and Survivor option shall receive a "Pop-up" in their retirement income if their beneficiary pre-deceases them.

4. *Excess Investment Earnings COLA*

Retirees at least age 55 who have been retired at least one year and members on long-term disability are eligible to receive a cost-of-living adjustment equal to one-half the increase in CPI for the prior calendar year. The COLA will be paid from a reserve of Excess Investment Earnings. If there are no Excess Investment Earnings in reserve, no COLA will be granted.

# ARIZONA STATE RETIREMENT PLAN

TABLE 18 (CONTINUED)

## 5. *Change in Section 38-737 Funding Period*

Section 38-737 was amended to change the funding period of the plan to a rolling 30-year period. The change is to be phased-in over the next nineteen years. If the Plan should cease to be overfunded, the funding period would immediately go to 30 years.

## O. LEGISLATED PLAN CHANGES ENACTED BY THE 1995 LEGISLATURE OF THE STATE OF ARIZONA

### 1. *Change in Maximum Increase Provided by Excess Investment Earnings COLA*

The maximum COLA payable from Excess Investment Earnings was increased from 50 percent to 100 percent of the increase in the CPI.

### 2. *Removal of LTD Benefit from the Plan*

The Legislature established a new LTD program and removed the LTD benefit from the plan. Liabilities for current LTD recipients were transferred to the new LTD program effective October 1, 1995.

### 3. *Creation of Separate Account for the Health Premium Supplement*

The Health Premium Supplement benefit is to be separated into a 401(h) account. The assets and liabilities associated with the Health Premium Supplement will be accounted for separately.

## P. LEGISLATED PLAN CHANGES ENACTED BY THE 1996 LEGISLATURE OF THE STATE OF ARIZONA

### 1. *No material changes.*

## Q. LEGISLATED PLAN CHANGES ENACTED BY THE 1997 LEGISLATURE OF THE STATE OF ARIZONA

1. *Creation of family Health Supplement* – Allows unused portion of the Health Supplement of a member or dependent to be used to pay the other recipients' health insurance premium.

2. The calculation methodology for the Excess Investment Earnings COLA was modified.

3. The contribution rate will be determined on a biennial cycle beginning with the 1999/2000 fiscal year.

# ARIZONA STATE RETIREMENT PLAN

TABLE 18 (CONTINUED)

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## R. LEGISLATED PLAN CHANGES ENACTED BY THE 1998 LEGISLATURE OF THE STATE OF ARIZONA

1. *No material changes.*

## S. LEGISLATED PLAN CHANGES ENACTED BY THE 1999 LEGISLATURE OF THE STATE OF ARIZONA

1. *Enhanced Refund Option*

Employees who terminate prior to eligibility for retirement may elect to receive a refund of their employee contributions with interest. If the employee has at least five years of service, the employee is also entitled to a share of the employer contributions with interest. The share is 50 percent with five years of service and increases 10 percent for each additional year of service to a maximum of 100 percent for ten or more years of service.

2. *Benefit Multiplier Increased to 2.1 percent*

The benefit multiplier will increase from 2.0 percent to 2.1 percent effective July 1, 2000.

3. *5 percent Ad Hoc Increase*

A 5 percent retiree ad hoc increase for retirees and beneficiaries effective July 1, 2000.

4. *Increase in Maximum Service While on LTD*

Increase in the maximum amount of service that may be accrued while on LTD from 25 to 30.

5. *Changes in Permanent Benefit Increase COLA*

The maximum aggregate COLA was increased from 3 percent to 4 percent.

- a. The threshold for determining "Excess Earnings" was lowered from 9 percent to 8 percent.
- b. The limitation of the COLA to the increase in the CPI was removed.

# ARIZONA STATE RETIREMENT PLAN

## SCHEDULE OF PLAN ACTIVE MEMBER VALUATION DATA LAST 10 YEARS

Valuation As of June 30	Contributing Active Members			
	Number	Annual Payroll	Annual* Average Pay	% Increase in Average Pay
1990	129,701	\$ 3,211,682,400	\$ 24,762	2.9
1991	134,751	3,452,982,100	25,625	3.5
1992	139,633	3,615,960,300	25,896	1.1
1993	144,477	3,748,182,900	25,943	0.2
1994	154,901	4,125,796,100	26,635	2.7
1995	155,444	4,432,113,900	28,513	7.1
1996	159,572	4,632,282,200	29,029	1.8
1997	164,390	4,836,336,900	29,420	1.3
1998	170,864	5,164,127,700	30,224	2.7
1999	176,368	5,487,933,600	31,116	3.0

## SCHEDULE OF PLAN RETIREES ADDED TO AND REMOVED FROM ROLLS LAST 10 YEARS

Year Ended June 30	Added to Rolls	Removed From Rolls	Rolls End of Year	Average Annual Allowances	% Increase in Annual Allowances
1990	2,117	738	33,385	\$ 7,908	8.4
1991	2,209	687	34,907	8,244	4.3
1992	2,303	720	36,490	8,436	2.3
1993	3,954	760	39,684	9,744	15.5
1994	2,280	920	41,044	10,244	5.1
1995	3,223	889	43,378	10,536	2.9
1996	3,845	1,248	45,975	11,040	4.8
1997	3,578		49,743	11,340	2.7
1998	3,353	1,179	51,917	11,784	3.9
1999	4,380	1,193	55,104	12,288	4.3

\* Annual average pay includes Plan members. It is calculated by dividing annual payroll by the number of members.

# ARIZONA STATE RETIREMENT SYSTEM

## SCHEDULE OF UNFUNDED (OVER) ACCRUED LIABILITIES - PLAN LAST 10 YEARS

Year Ended 6/30	Aggregate Accrued Liabilities Plan	Actuarial Value of Net Plan Assets	Assets as a % of Accrued Liabilities Plan	Unfunded (over) Accrued Liabilities – Plan (UAL)	Active Member Payroll	UAL as a % of Active Member Payroll
1990	\$ 6,744,975,400	\$ 7,296,578,000	108	\$ (551,602,600)	3,221,728,000	(17.1)
1991	7,168,395,900	7,822,252,200	109	(653,856,300)	3,491,210,600	(18.7)
1992	8,209,797,700	8,841,715,700	108	(631,918,000)	3,674,258,800	(17.2)
1993	8,921,137,100	9,770,364,000	110	(849,226,900)	3,778,408,600	(22.5)
1994	9,668,031,500	10,540,457,100	109	(872,425,600)	3,973,369,600	(22.0)
1995	10,303,617,000	11,520,933,300	112	(1,217,316,300)	4,228,264,800	(28.8)
1996	11,110,688,400	12,578,870,100	113	(1,468,181,700)	4,465,496,000	(32.9)
1997	12,385,445,400	14,169,191,400	114	(1,783,746,000)	4,674,843,500	(38.2)
1998	13,638,356,506	16,168,476,400	119	(2,530,119,880)	4,968,476,529	(50.9)
1999	16,121,899,529	18,760,959,854	116	(2,639,060,325)	5,487,933,600	(48.1)

## RELATIONSHIP BETWEEN ACCRUED LIABILITIES AND ASSETS LAST 10 YEARS

Year Ended 6/30	Aggregate Accrued Liabilities for			Net Assets Available for Benefits	Portion of Accrued Liabilities Covered by Net Assets Available for Benefits		
	(1) Active Member Contributions	(2) Retirees and Beneficiaries	(3) Active Members (Employer Financed Portion)		(1)	(2)	(3)
1990	\$ 1,649,418,700	\$ 2,567,352,200	\$ 2,528,204,500	\$ 7,296,578,000	100%	100%	121.8%
1991	1,806,773,400	2,775,297,100	2,586,325,300	7,822,252,200	100	100	125.3
1992	1,973,747,000	3,260,573,300	2,975,477,400	8,841,715,700	100	100	121.2
1993	2,072,034,100	3,736,129,000	3,112,974,000	9,770,364,000	100	100	127.3
1994	2,265,838,800	3,929,200,100	3,472,992,600	10,540,457,100	100	100	125.1
1995	2,465,878,000	4,257,018,600	3,580,720,400	11,520,933,300	100	100	134.0
1996	2,422,775,000	4,740,637,300	3,947,275,600	12,578,870,100	100	100	137.2
1997	2,442,205,300	5,122,420,700	4,820,819,400	14,169,191,400	100	100	137.0
1998	2,571,206,900	5,530,497,100	5,536,652,506	16,168,476,400	100	100	145.7
1999	2,679,011,640	6,454,089,795	6,988,798,093	18,760,959,854	100	100	137.8

# ARIZONA STATE RETIREMENT SYSTEM

## SCHEDULE OF RECOMMENDED VS. ACTUAL PLAN CONTRIBUTIONS LAST 10 YEARS

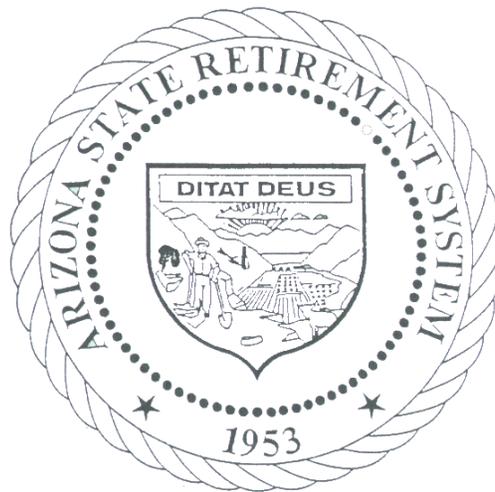
Year Ended June 30	Active Member Payroll	Employee Contributions	Employer Retirement Contribution Rate – Actual	Actuary Recommended Contribution
1990	\$3,212,000,000	\$ 64,434,600	3.82%	3.82%
1991	3,453,000,000	133,364,200	3.60%	3.60%
1992	3,616,000,000	132,273,300	3.59%	3.59%
1993	3,748,000,000	135,644,900	3.14%	4.09%
1994	4,126,000,000	124,763,800	3.75%	3.75%
1995	4,432,000,000	158,559,900	3.36%	3.95%
1996	4,632,000,000	171,921,600 *	3.20%	3.20%
1997	4,836,000,000	172,602,900 *	3.05%	3.05%
1998	5,164,000,000	176,768,737 *	2.85%	2.85%
1999	5,488,000,000	179,086,642	2.17%	2.17%

\* Excludes contributions of \$884,669, \$905,200 and \$926,800 for ASRS System members who contributed 7.49 percent during 1998, 1997 and 1996, respectively.

## ANALYSIS OF FINANCIAL EXPERIENCE FOR THE PLAN

Year Ended June 30	Unfunded Actuarial Liability (UAAL), Prior Year	Normal Cost for the Year	Contributions for the Year	Interest at 8% on UAAL	On normal cost	On Contributions	Total	Expected UAAL	Actual UAAL	Gain (Loss) for the Year
1991	\$ (551,602,621)	\$ 318,694,224	\$ (267,194,502)	\$ (44,128,210)	\$ 25,495,538	\$ (10,687,780)	\$ (29,320,452)	\$ (529,423,351)	\$ (653,856,378)	\$ 124,433,027
1992	(653,856,378)	352,490,100	(265,305,634)	(52,308,510)	28,199,208	(10,612,225)	(34,721,527)	(601,393,439)	(631,918,013)	30,524,574
1993	(631,918,013)	400,314,138	(278,158,497)	(50,553,441)	32,025,131	(11,126,340)	(29,654,650)	(539,417,022)	(849,226,914)	309,809,892
1994	(849,226,914)	423,197,748	(256,841,228)	(67,938,153)	33,855,820	(10,273,649)	(44,355,982)	(727,226,376)	(872,425,634)	145,199,258
1995	(872,425,633)	448,920,571	(324,925,398)	(69,794,051)	35,913,646	(12,997,016)	(46,877,421)	(795,307,881)	(1,217,316,348)	422,008,467
1996	(1,217,316,348)	460,392,965	(299,724,778)	(97,385,308)	36,831,437	(11,988,991)	(72,542,862)	(1,129,191,023)	(1,468,181,654)	338,990,631
1997	(1,468,181,653)	482,421,250	(309,394,448)	(117,454,532)	38,593,700	(12,375,778)	(91,236,610)	(1,386,391,461)	(1,783,746,059)	397,354,598
1998	(1,783,746,059)	506,172,866	(321,349,998)	(142,699,685)	40,493,829	(12,854,000)	(115,059,856)	(1,713,983,047)	(2,530,119,881)	816,136,834
1999	(2,530,119,881)	540,458,020	(347,970,526)	(202,409,590)	43,236,642	(13,918,821)	(173,091,769)	(2,510,724,156)	(2,639,060,325)	128,336,169

# STATISTICAL SECTION



# ARIZONA STATE RETIREMENT SYSTEM COMPREHENSIVE ANNUAL FINANCIAL REPORT

## INDEX – STATISTICAL SECTION

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# ARIZONA STATE RETIREMENT SYSTEM

## LIST OF EMPLOYERS

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### PUBLIC SCHOOLS

Agua Fria UHS Dist. 216  
Aguila Elem. Dist. 63  
Ajo Unified Dist. 15  
Alhambra Elem. Dist. 68  
Alpine Elem. Dist. 7  
Altar Valley Dist. 51  
Amphitheater Unified Dist. 10  
Antelope UHS Dist. 50  
Apache Elem. Dist. 42  
Apache Junction Unified Dist. 43  
Arlington Elem. Dist. 47  
Ash Creek Elem. Dist. 53  
Ash Fork Unified Dist. 31  
Avondale Elem. Dist. 44  
Bagdad Unified Dist. 20  
Balsz Elem. Dist. 31  
Beaver Creek Elem. Dist. 26  
Benson Elem. Dist. 9  
Benson UHS Dist. 9  
Bicentennial UHS Dist. 76  
Bisbee Unified Dist. 2  
Blue Elem. Dist. 22  
Blue Ridge Unified Dist. 32  
Bonita Elem. Dist. 16  
Bouse Elem. Dist. 26  
Bowie Unified Dist. 14  
Buckeye Elem. Dist. 33  
Buckeye UHS Dist. 201  
Bullhead City Elem. Dist. 15  
Camp Verde Unified Dist. 28  
Canon Elem. Dist. 50  
Cartwright Elem. Dist. 83  
Casa Grande Elem. Dist. 4  
Casa Grande UHS Dist. 82  
Catalina Foothills Unified Dist. 16  
Cave Creek Unified Dist. 93  
Cedar Unified Dist. 25  
Chandler Unified Dist. 80  
Chevelon Butte Elem. Dist. 5  
Chinle Unified Dist. 24  
Chino Valley Unified Dist. 51  
Chloride Elem. Dist. 11  
Clarkdale-Jerome Elem. Dist. 3  
Clifton Unified Dist. 3  
Cochise Elem. Dist. 26  
Colorado City Unified Dist. 14  
Colorado River Union H.S. Dist. 2  
Combs (J.O.) Elem. Dist. 44  
Concho Elem. Dist. 6  
Congress Elem. Dist. 17  
Continental Elem. Dist. 39  
Coolidge Unified Dist. 21  
Cottonwood-Oak Creek Elem. Dist. 6  
Crane Elem. Dist. 13  
Creighton Elem. Dist. 14  
Crown King Elem. Dist. 41  
Deer Valley Unified Dist. 97  
Double Adobe Elem. Dist. 45  
Douglas Unified Dist. 27  
Duncan Unified Dist. 2  
Dysart Unified Dist. 89  
Eagle Elem. Dist. 45  
East Valley Technical Institute  
Elfrida Elem. Dist. 12  
Eloy Elem. Dist. 11  
Fisher (Ruth) Elem. Dist. 90  
Flagstaff Unified Dist. 1  
Florence Unified Dist. 1  
Flowing Wells Unified Dist. 8  
Ft. Thomas Unified Dist. 7  
Fountain Hills Unified Dist. 98  
Fowler Elem. Dist. 45  
Fredonia-Moccasin Unified Dist. 6  
Gadsden Elem. Dist. 32  
Ganado Unified Dist. 20  
Gila Bend Unified Dist. 24  
Gilbert Unified Dist. 41  
Glendale Elem. Dist. 40  
Glendale UHS Dist. 205  
Globe Unified Dist. 1  
Grand Canyon Unified Dist. 4  
Hackberry Elem. Dist. 3  
Hayden-Winkelman Unified Dist. 41  
Heber Overgaard USD No. 6  
Higley Elem. Dist. 60  
Hillside Elem. Dist. 35  
Holbrook Unified Dist. 3  
Humboldt Unified Dist. 22  
Hyder Elem. Dist. No. 16  
Indian Oasis-Baboquivari 40  
Isaac Elem. Dist. 5  
Joseph City Unified Dist. 2  
Kayenta Unified Dist. 27  
Kingman Elem. Dist. 4  
Kirkland Elem. Dist. 23  
Klondyke School Dist. 09  
Kyrene Elem. Dist. 28  
Lake Havasu Unified Dist. 1  
Laveen Elem. Dist. 59  
Liberty Elem. Dist. 25  
Litchfield Elem. Dist. 79  
Littlefield Elem. Dist. 9  
Littleton Elem. Dist. 65  
Madison Elem. Dist. 38  
Maine Cons. Elem. Dist. 10  
Mammoth-San Manuel Unified Dist. 8  
Marana Unified Dist. 6  
Maricopa Unified Dist. 20  
Mayer Unified Dist. 43  
McNary Elem. Dist. 23  
McNeal Elem. Dist. 55  
Mesa Unified Dist. 4  
Miami Unified Dist. 40

## PUBLIC SCHOOLS (Continued)

Mingus UHS Dist. 4  
Mobile Elem. Dist. 86  
Mohave Educational Svcs Coop  
Mohave UHS Dist. 30  
Mohave Valley Elem. Dist. 16  
Mohawk Valley Elem. Dist. 17  
Morenci Unified Dist. 18  
Morristown Elem. Dist. 75  
Murphy Elem. Dist. 21  
Naco Elem. Dist. 23  
Nadaburg Elem. Dist. 81  
Nogales Unified Dist. 1  
Oracle Elem. Dist. 2  
Osborn Elem. Dist. 8  
Owens Whitney Elem. Dist. 6  
Page Unified Dist. 8  
Palo Verde Elem. Dist. 49  
Paloma Elem. Dist. 94  
Palominas Elem. Dist. 49  
Paradise Valley Dist. 69  
Parker Unified Dist. 27  
Patagonia Elem. Dist. 6  
Patagonia UHS Dist. 20  
Payson Unified Dist. 10  
Peach Springs Elem. Dist. 8  
Peach Springs High School 7  
Pearce Elem. Dist. 22  
Pendergast Elem. Dist. 92  
Peoria Unified Dist. 11  
Phoenix Elem. Dist. 1  
Phoenix UHS Dist. 210  
Picacho Elem. Dist. 33  
Pima Unified Dist. 6  
Pine Elem. Dist. 12  
Pinon Unified Dist. 4  
Pomerene Elem. Dist. 64  
Prescott Unified Dist. 1  
Quartzsite Elem. Dist. 4  
Queen Creek Unified Dist. 95  
Ray Unified Dist. 3  
Red Mesa Unified Dist. 27  
Red Rock Elem. Dist. 5  
Riverside Elem. Dist. 2  
Roosevelt Elem. Dist. 66  
Round Valley Unified Dist. 10  
Sacaton Elem. Dist. 18  
Safford Unified Dist. 1  
Sahuarita Unified Dist. 30  
St. David Unified Dist. 21  
St. Johns Unified Dist. 1  
Salome Cons. Elem. Dist. 30  
San Carlos Unified Dist. 20  
San Fernando Elem. Dist. 35  
San Simon Unified Dist. 18  
Sanders Unified Dist. 18  
Santa Cruz Elem. Dist. 28  
Santa Cruz Valley Dist. 35  
Santa Cruz Valley UHS Dist. 840  
Scottsdale Unified Dist. 48  
Sedona – Oak Creek School Dist. 9  
Seligman Unified Dist. 40  
Sentinel Elem. Dist. 71  
Show Low Unified Dist. 10  
Sierra Vista Unified Dist. 68  
Skull Valley Elem. Dist. 15  
Snowflake Unified Dist. 5  
Solomonville Elem. Dist. 5  
Somerton Elem. Dist. 11  
Sonoita Elem. Dist. 25  
Stanfield Elem. Dist. 24  
Sunnyside Unified Dist. 12  
Superior Unified Dist. 15  
Tanque Verde Unified Dist. 13  
Tempe Elem. Dist. 3  
Tempe UHS Dist. 213  
Thatcher Unified Dist. 4  
Tolleson Elem. Dist. 17  
Tolleson UHS Dist. 214  
Toltec Elem. Dist. 22  
Tombstone Unified Dist. 1  
Tonto Basin School Dist. 33  
Topock Elem. Dist. 12  
Tuba City Unified Dist. 15  
Tucson Unified Dist. 1  
Union Elem. Dist. 62  
Vail Elem. Dist. 20  
Valentine Elem. Dist. 22  
Valley UHS Dist. 22  
Vernon Elem. Dist. 9  
Villa Oasis Inter School  
Walnut Grove School District  
Washington Elem. Dist. 6  
Wellton Elem. Dist. 24  
Wenden Elem. Dist. 19  
Whiteriver Unified Dist. 20  
Wickenburg Unified Dist. 9  
Willcox Unified Dist. 13  
Williams Unified Dist. 2  
Williamson Valley Elem. Dist. 2  
Wilson Elem. Dist. 7  
Window Rock Unified Dist. 8  
Winslow Unified Dist. 1  
Yarnell Elem. Dist. 52  
Young Elem. Dist. 5  
Yuma County Accommodation School  
Yucca Elem. Dist. 13  
Yuma Elem. Dist. 1  
Yuma UHS Dist. 70

## CHARTER SCHOOLS

Accelerated Learning Center Laboratory  
Acclaim Charter School  
Academy of Excellence, Inc.  
American Heritage Academy Chart. School  
ATOP Academy College Preparatory  
Arizona Career Academy  
Arizona Montessori Charter School  
Arizona School for the Arts  
AZ Agribusiness & Equine Center Chart. Sch.  
Ball Charter School  
Basis Middle School  
Baurau Charter School  
Benjamin Franklin Charter School  
Benjamin Franklin School, Ltd.  
Career Development Inc.  
Carmel Comm. Integrated Arts Chart. Sch.  
Casey Country Day Charter School  
Challenge School, Inc.  
Charter Foundation, Inc.  
Destiny Schools, Inc.  
Discovery Academy of St. Johns  
Discovery Plus Academy Charter School  
Dragonflye Charter School  
EAGLE Academy Charter School  
Eagles Aerie Schools  
Ecotech Agricultural Charter School  
Edge EDE Charter School  
EDU Preneurship Charter School  
EDU-Prize Charter School  
Enterprise Academy Charter School  
Esperanza Montessori Academy  
Excel Educations Centers Inc.  
Excel Schools, Inc.  
Entity Z Accounts  
Flagstaff Jr. Academy Charter School  
Franklin Phonetic Primary School  
Future Development Corp.  
Gan Yaladeem, the Looking Glass  
Genesis Academy Charter School  
Gila County Transition Charter School  
G.R.A.D.E. Charter School  
Ha:San Preparatory and Leadership School  
Heritage Academy Inc.  
Horizon Charter School  
Humanities and Science Institute Inc.  
International Commerce Institute Inc.  
Kingman Academy of Learning  
Lake Havasu Charter School  
Lake Powell Academy Inc.  
Laurent Clerc Elem. Charter School  
Learning Institute  
Mexicayotl Academy  
Mingus Mountain Academy  
Mingus Springs Charter School  
New School for the Arts  
New West Charter School  
Noah Webster Basic School  
Northland Preparatory Academy  
PCAE-Edge  
Phoenix School of Academic Excellence  
Pimeria Alta Learning Center  
Pine Forest Charter School  
Presidio School  
Renaissance Education Consort, Inc.  
Salt River Pima-Maricopa Indian Chart. Sch  
Scholars' Academy Charter School  
Scottsdale Institute for the Arts  
Sedona Charter School  
Sequoia School LLC Charter School  
Skyview Charter School  
Sonoran Desert School  
Sunway Management Charter School  
Tolchi' Kooh Charter School Inc.  
Triumphant Learning Center  
Valley Academies Inc.  
Ventana Academic School  
Village Charter School  
Westwind Academy  
Young Scholars Academy Chart. Sch. Corp.

## COLLEGES

Arizona Western College  
Central Arizona College  
Cochise College  
Coconino County Community College  
Eastern Arizona College  
Maricopa County Comm.  
Mohave Community College  
Northland Pioneer College  
Pima Community College  
Yavapai College

## CITIES AND TOWNS

City of Apache Junction  
City of Avondale  
City of Benson  
City of Bisbee  
City of Casa Grande  
City of Chandler  
City of Coolidge  
City of Cottonwood  
City of Douglas  
City of El Mirage  
City of Eloy  
City of Flagstaff  
City of Glendale  
City of Globe  
City of Goodyear  
City of Holbrook  
City of Kingman  
City of Lake Havasu  
City of Litchfield Park  
City of Mesa  
City of Nogales

City of Peoria  
City of Prescott  
City of Safford  
City of San Luis  
City of Scottsdale  
City of Show Low  
City of Sierra Vista  
City of Somerton  
City of So. Tucson  
City of Surprise  
City of Tempe  
City of Tolleson  
City of Tombstone  
City of Willcox  
City of Williams  
City of Winslow  
City of Yuma  
Town of Buckeye  
Town of Clifton  
Town of Florence  
Town of Fredonia

Town of Gila Bend  
Town of Gilbert  
Town of Guadalupe  
Town of Hayden  
Town of Kearny  
Town of Miami  
Town of Paradise Valley  
Town of Parker  
Town of Patagonia  
Town of Pima  
  
Town of Queen Creek  
Town of Sahuarita  
Town of Snowflake  
Town of Springerville  
Town of Superior  
Town of Taylor  
Town of Thatcher  
Town of Wellton  
Town of Wickenburg  
Town of Youngtown

## COUNTIES

Apache County  
Cochise County  
Coconino County  
Gila County  
Graham County

Greenlee County  
Maricopa County  
Mohave County  
Navajo County  
Pima County

Pinal County  
Santa Cruz County  
Yavapai County  
Yuma County

## SPECIAL

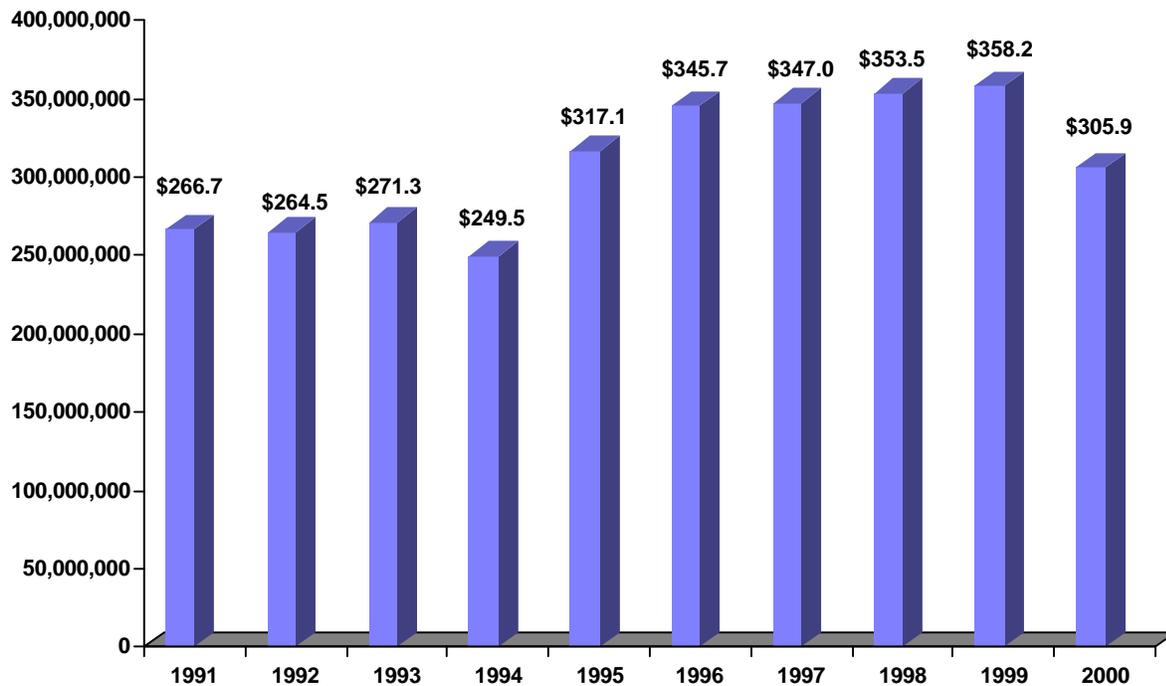
Apache Jct. Fire District  
Arizona Association of Counties  
Arizona City Sanitary District  
Arizona Interscholastic Association  
Black Canyon Water Improvement District  
Bullhead City Fire District  
Central Arizona Project  
Central Heights Fire District  
Christopher Kohls Fire District  
City of Eloy Housing Authority  
City of Yuma Housing Authority  
Colorado River Sewage System  
Drexel Heights Fire District  
El Frida Fire District  
Fire District of Sun City West  
Flagstaff Housing Authority  
Golder Ranch Fire District  
Harquahala Valley Irrigation District  
Kino Community Hospital  
Maricopa Integrated Health System  
Maricopa Water District

Metropolitan Domestic Water Improve. Dist.  
New Magma Irrigation and Drainage District  
Northwest Fire District  
Picture Rock Fire District  
Pima Home Health  
Posada del sol Health  
Puerco Valley Fire District  
Queen Valley Domestic Water Impr. Dist.  
Queen Valley Sanitary District  
Roosevelt Irrigation District  
San Carlos Irrigation & Drain  
State of Arizona  
Sun City Fire District  
Superstition Mtn Community Facilities Dist  
Tri-City Fire District  
Tucson Airport Authority  
Water Utilities Community District  
Western Arizona Council of Governments  
Williams Gateway Airport Authority  
Yuma County Airport Authority  
Yuma Mesa Irrigation District

# ARIZONA STATE RETIREMENT SYSTEM

## CONTRIBUTIONS RECEIVED

(in millions)



### YEAR ENDED JUNE 30

#### ACTUAL CONTRIBUTION RATES

In Percentage of Payroll

	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996*</u>	<u>1997*</u>	<u>1998*</u>	<u>1999*</u>	<u>2000*</u>
Employer	3.82	3.60	3.59	3.14	3.75	3.85	3.69	3.54	3.34	2.66
Employee	3.82	3.60	3.59	3.14	3.75	3.85	3.69	3.54	3.34	2.66

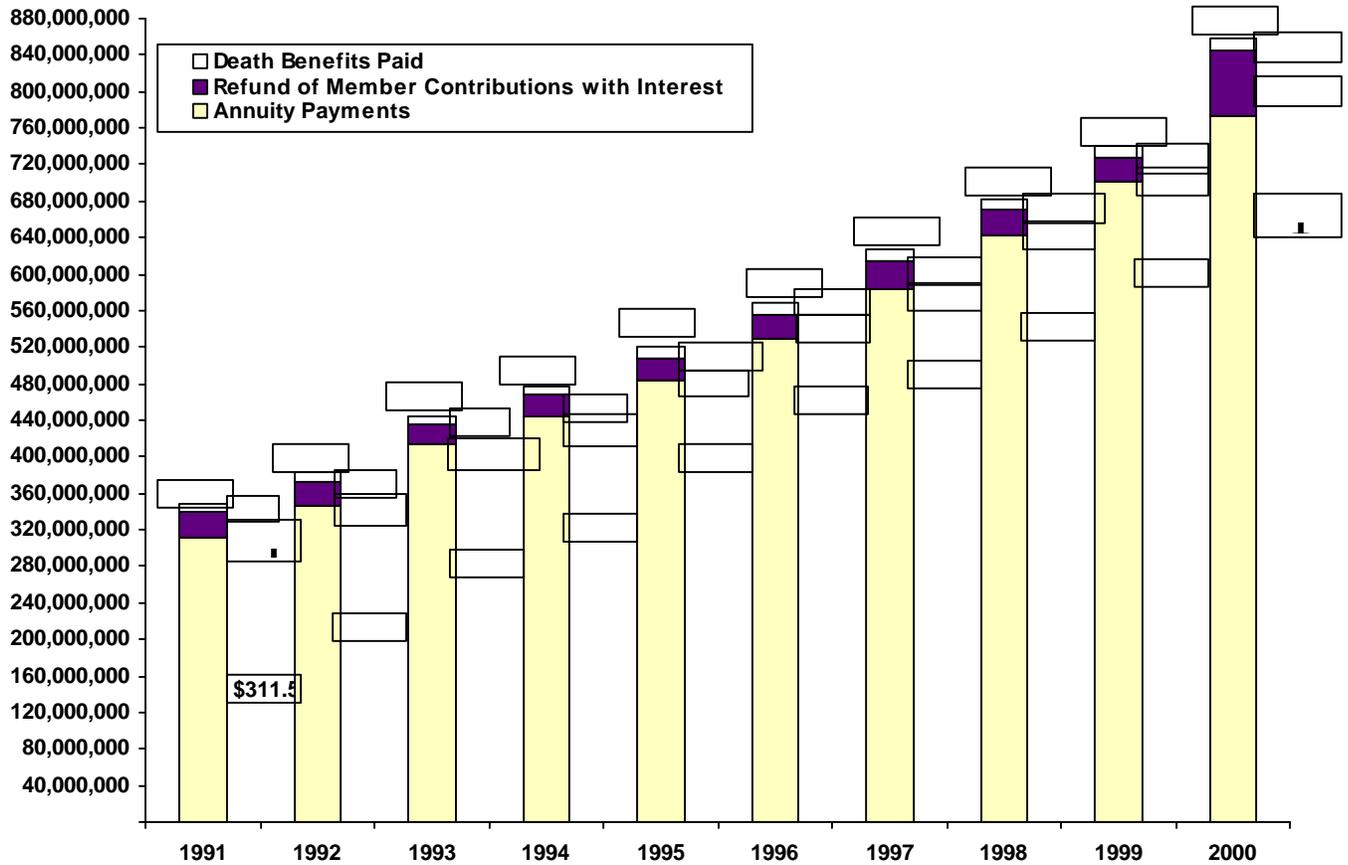
The contribution rates include long-term disability contributions.

\* Effective January 1, 1996, ASRS members (defined contribution) and their employers, each pays a 7.49 percent contribution rate (includes 0.49 percent for long-term disability).

# ARIZONA STATE RETIREMENT SYSTEM

## TOTAL BENEFIT PAYMENTS

(in millions)



### YEAR ENDED JUNE 30

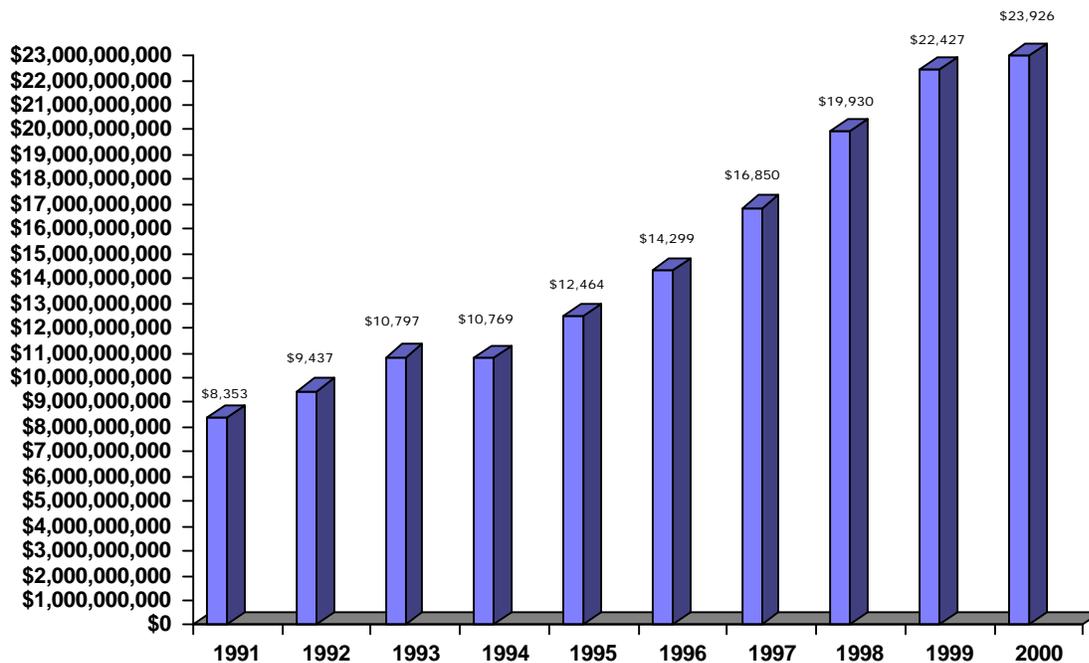
Total benefit payments have increased from \$347.8 million in fiscal year 1991 to \$858.4 million in fiscal year 2000, an increase in excess of 146 percent over the nine-year period. While these total figures include annuity payments, death benefits and refunds to terminated members, the rate of growth in annuity payments has been extremely impressive, increasing in excess of 148 percent over the level for annuity payments nine years ago. This schedule does not include Social Security benefits.

# ARIZONA STATE RETIREMENT SYSTEM

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## TOTAL RESERVES FOR BENEFITS\*

(at market)  
in millions



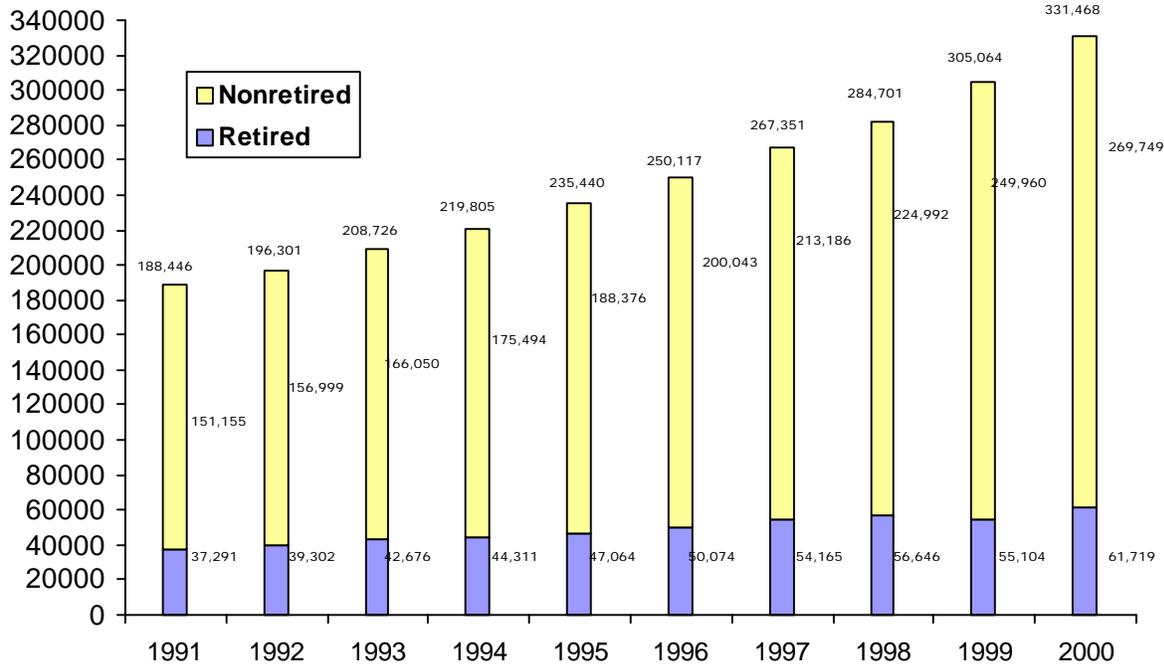
YEAR ENDED JUNE 30

The increase in total reserves for benefits, nearly 187 percent in the past nine years, reflects the actuarial strength of the Retirement System.

\*Total Reserves for Benefits had been reported at cost in previous years.

# ARIZONA STATE RETIREMENT SYSTEM

## NONRETIRED & RETIRED MEMBERS



### YEAR ENDED JUNE 30

The Arizona State Retirement System as it exists today has evolved from the consolidation of the original State Retirement System with the former Teachers' Retirement System in 1955. The category of retired members includes many survivors of former members, who have qualified for monthly benefit payments rather than for single death benefit payments.

# ARIZONA STATE RETIREMENT SYSTEM

## REVENUES BY SOURCE – TEN YEAR HISTORICAL DATA

Fiscal Year	Employer/ Employee Contribution Rate	Employer/ Employee Long-Term Disability Rate**	Employee Contributions as a Percent of Covered Payroll	Employer Contribution Amount	Employee Contribution Amount	Member Reimburse- ments and Other	Net Investment Income	Total Additions
1991	3.82 %	N/A	100.00 %	\$ 133,364,246	\$ 133,364,246	\$ 788,617	\$ 797,492,654	\$ 1,065,009,763
1992	3.60 %	N/A	100.00 %	132,273,316	132,273,316	945,836	1,513,686,627	1,779,179,095
1993	3.59 %	N/A	76.80 %	135,644,868	135,644,868	6,870,755	2,037,437,881	2,315,593,372
1994	3.14 %	N/A	100.00 %	124,763,806	124,763,806	7,319,048	725,271,172	982,117,832
1995	3.75 %	N/A	85.10 %	158,559,931	158,559,931	9,429,152	2,409,804,569	2,736,353,583
1996***	3.36 %	0.49 %	100.00 %	172,848,417	172,848,417	4,376,224	2,063,877,940	2,413,950,998
1997	3.20 %	0.49 %	100.00 %	173,508,019	173,508,019	11,480,946	2,832,718,071	3,191,215,116
1998	3.05 %	0.49 %	100.00 %	176,768,738	176,768,737	15,461,646	3,405,203,114	3,774,202,235
1999	2.85 %	0.49 %	100.00 %	179,086,635	179,086,642	46,170,568	2,848,321,337	3,252,665,182
2000	2.17 %	0.49 %	****	152,957,449	152,957,838	35,347,830	2,035,312,005	2,376,575,122

\* The Long-Term Disability Program was established effective July 1, 1995. ASRS members who were receiving LTD benefits prior to July 1, 1995 were transferred to the program on October 1, 1995. Contribution rates began July 1, 1995 and are paid 50 percent from employer funds and 50 percent by active members.

\*\* The 1995 Legislature passed legislation to separate the Health Premium Supplement contributions into a separate account. This portion of the employer contribution rate is included here. This separation is effective at the benefit's inception June 20, 1989.

\*\*\* Effective January 1, 1996, System members (defined contribution) and their employers, each pays a 7.49 percent contribution rate (includes .49 percent for long-term disability).

\*\*\*\* This information is shown only for the years available in accordance with the parameters of GASB 25. Additional years will be added as data becomes available.

# ARIZONA STATE RETIREMENT SYSTEM

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## EXPENSES BY TYPE – TEN YEAR HISTORICAL DATA

Fiscal Year	Benefit Payments	Administrative and Other	Total
1991	\$ 347,759,842	\$ 6,516,477	\$ 354,276,319
1992	382,354,504	8,115,966	390,470,470
1993	443,628,202	6,210,761	449,838,963
1994	476,768,678	5,521,389	482,290,067
1995	519,667,116	5,970,049	525,637,165
1996	568,901,122	8,244,791	577,145,913
1997	627,590,584	12,307,628	639,898,212
1998	682,336,368	12,541,090	694,877,458
1999	739,978,931	15,352,673	755,331,604
2000	858,307,881	19,743,695	878,051,576

## BENEFIT EXPENSES BY TYPE – TEN YEAR HISTORICAL DATA

Fiscal Year	Retirement Benefits	Death Benefits	Long-Term Disability	Health Benefit Supplement	Refunds of Contributions	Total
1991	\$ 311,478,056	\$ 8,871,147			\$ 27,410,639	\$ 347,759,842
1992	347,373,283	10,168,325			24,812,896	382,354,504
1993	414,878,522	7,304,695			21,444,985	443,628,202
1994	445,185,700	8,932,681			22,650,297	476,768,678
1995	483,573,463	11,577,469			24,516,184	519,667,116
1996	480,697,236	13,593,283	\$ 20,280,929	\$ 27,953,281	26,376,393	568,901,122
1997	522,524,936	13,582,730	30,051,668	30,148,793	31,282,457	627,590,584
1998	574,229,820	10,557,739	35,112,054	32,667,709	29,769,046	682,336,368
1999	627,612,050	11,484,518	39,839,055	34,935,156	26,108,152	739,978,931
2000	695,425,997	13,255,861	41,220,028	37,651,498	70,754,497	858,307,881

NOTE: Effective July 1, 1995, the ASRS established separate accounts for Long-Term Disability and Health Benefit Supplement.

## SCHEDULE OF AVERAGE BENEFIT PAYMENTS FOR RETIREES UNDER THE PLAN\*

	YEARS OF CREDITED SERVICE										TOTAL
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45+	
Fiscal year 1990											
Average monthly benefit	\$ 128	\$ 203	\$ 362	\$ 555	\$ 777	\$ 1,200	\$ 1,540	\$ 1,431	\$ 1,043	\$ 928	\$ 659
Number of retirees	548	5,671	7,487	6,537	5,357	4,144	2,426	803	345	67	33,385
<b>AVERAGE CREDITED SERVICE</b>											17.9
Fiscal year 1991											
Average monthly benefit	\$ 128	\$ 208	\$ 372	\$ 577	\$ 817	\$ 1,259	\$ 1,610	\$ 1,476	\$ 1,086	\$ 966	\$ 687
Number of retirees	587	5,932	7,851	6,747	5,624	4,438	2,558	790	322	57	34,906
<b>AVERAGE CREDITED SERVICE</b>											17.9
Fiscal year 1992											
Average monthly benefit	\$ 124	\$ 207	\$ 377	\$ 588	\$ 839	\$ 1,292	\$ 1,650	\$ 1,521	\$ 1,112	\$ 936	\$ 703
Number of retirees	646	6,220	8,215	6,952	5,888	4,687	2,718	800	308	56	36,490
<b>AVERAGE CREDITED SERVICE</b>											17.9
Fiscal year 1993											
Average monthly benefit	\$ 125	\$ 223	\$ 427	\$ 671	\$ 979	\$ 1,482	\$ 1,862	\$ 1,747	\$ 1,254	\$ 1,066	\$ 812
Number of retirees	718	6,597	8,742	7,443	6,640	5,379	3,004	827	291	43	39,684
<b>AVERAGE CREDITED SERVICE</b>											18.0
Fiscal year 1994											
Average monthly benefit	\$ 126	\$ 229	\$ 445	\$ 701	\$ 1,032	\$ 1,555	\$ 1,980	\$ 1,880	\$ 1,335	\$ 1,105	\$ 852
Number of retirees	798	6,906	9,000	7,602	6,881	5,615	3,099	829	277	37	41,044
<b>AVERAGE CREDITED SERVICE</b>											17.9
Fiscal year 1995											
Average monthly benefit	\$ 125	\$ 232	\$ 454	\$ 717	\$ 1,069	\$ 1,598	\$ 2,034	\$ 2,004	\$ 1,399	\$ 1,135	\$ 878
Number of retirees	855	7,345	9,444	7,965	7,274	6,065	3,287	853	260	30	43,378
<b>AVERAGE CREDITED SERVICE</b>											17.9
Fiscal year 1996											
Average monthly benefit	\$ 123	\$ 239	\$ 470	\$ 741	\$ 1,118	\$ 1,669	\$ 2,119	\$ 2,125	\$ 1,506	\$ 1,230	\$ 920
Number of retirees	918	7,781	9,849	8,334	7,791	6,654	3,498	884	240	26	45,975
<b>AVERAGE CREDITED SERVICE</b>											17.9
Fiscal year 1997											
Average monthly benefit	\$ 123	\$ 244	\$ 481	\$ 759	\$ 1,151	\$ 1,719	\$ 2,172	\$ 2,197	\$ 1,613	\$ 1,270	\$ 945
Number of retirees	1,034	8,446	10,611	8,967	8,421	7,296	3,756	947	240	25	49,743
<b>AVERAGE CREDITED SERVICE</b>											18.0
Fiscal year 1998											
Average monthly benefit	\$ 122	\$ 254	\$ 499	\$ 789	\$ 1,196	\$ 1,785	\$ 2,248	\$ 2,318	\$ 1,749	\$ 1,565	\$ 982
Number of retirees	1,149	8,788	11,050	9,305	8,786	7,718	3,908	965	226	22	51,917
<b>AVERAGE CREDITED SERVICE</b>											18.0
Fiscal year 1999											
Average monthly benefit	\$ 120	\$ 259	\$ 511	\$ 806	\$ 1,230	\$ 1,846	\$ 2,332	\$ 2,448	\$ 1,969	\$ 1,771	\$ 1,024
Number of retirees	1,251	9,180	11,581	9,653	9,393	8,475	4,294	1,039	217	21	55,104
<b>AVERAGE CREDITED SERVICE</b>											18.2

\*Statistics are not available for system retirees of the ASRS

# ARIZONA STATE RETIREMENT SYSTEM

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## RETIREMENT BENEFIT OPTIONS

### **LIFE ANNUITY – REFUND PROVISION**

Provides member monthly benefit for life. If death occurs before all member contributions, plus interest, have been paid, the remaining balance will be paid in a lump sum or at the same monthly amount in effect at the time of the member's death to the designated beneficiary.

### **LIFE ANNUITY – FIVE YEARS CERTAIN**

Provides member monthly benefit for life. If death occurs before the retired member receives 60 monthly payments, the remaining monthly payments (or balance of the 60 payments) will be paid to the retired member's designated beneficiary. Members under the age of 103 at retirement are eligible to choose this option.

### **LIFE ANNUITY – TEN YEARS CERTAIN**

Provides member monthly benefit for life. If death occurs before the retired member receives 120 monthly payments, the remaining monthly payments (or balance of the 120 monthly payments) will be paid to the retired member's designated beneficiary. Members under the age of 91 are eligible to choose this option.

### **LIFE ANNUITY – FIFTEEN YEARS CERTAIN**

Provides member monthly benefit for life. If death occurs before the retired member receives 180 monthly payments, the remaining monthly payments (or balance of the 180 monthly payments) will be paid to the designated beneficiary. Members under the age of 84 are eligible to choose this option.

### **JOINT ANNUITY – 100 percent TO CONTINGENT SURVIVOR**

Provides member monthly benefit for life then also provides a life annuity equal to 100 percent of the member's monthly benefit for one designated beneficiary should the beneficiary survive the member. Members may choose this option (1) if the beneficiary is the member's spouse, or (2) if the beneficiary is not the spouse and the member is not more than 10 years older than the beneficiary.

Provides member monthly benefit for life then also provides a life annuity equal to  $66 \frac{2}{3}$  percent of the member's monthly benefit for one designated beneficiary should the beneficiary survive the member. Members may choose this option (1) if the beneficiary is the member's spouse, or (2) if the beneficiary is not the spouse and the member is not more than 24 years older than the beneficiary.

### **JOINT ANNUITY – 50 percent TO CONTINGENT SURVIVOR**

Provides member monthly benefit for life then also provides a life annuity equal to 50 percent of the member's monthly benefit for one designated beneficiary should the beneficiary survive the member.

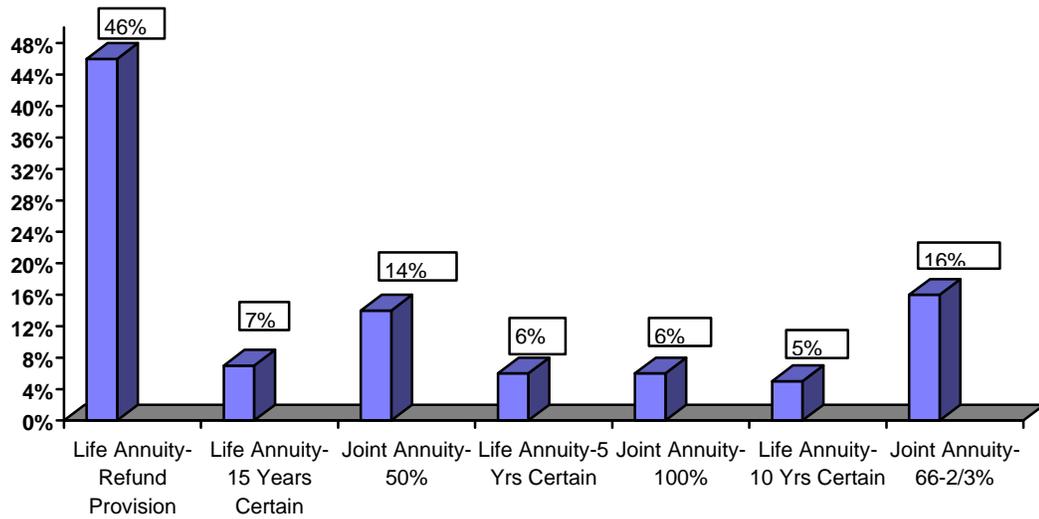
Members who choose a joint annuity payment option may rescind the option at any time and revert to the Life Annuity – Refund Provision or change the contingent annuitant. A member who reverted to the life annuity may later change back to the same joint annuity option originally elected and name the same or a new contingent annuitant. The member's benefit will be adjusted to reflect any change made.

# ARIZONA STATE RETIREMENT SYSTEM

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## RETIREMENT BENEFIT OPTIONS SELECTED

AS OF JUNE 30, 2000



# ARIZONA STATE RETIREMENT SYSTEM

## RETIRED MEMBERS BY TYPE OF BENEFITS

AS OF JUNE 30, 2000

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Type of Benefits	Total Number	Plan	System*
Life annuity, with refund provision	25,973	25,205	768
Life annuity, 5-years certain	3,663	3,605	58
Life annuity, 10-years certain	7,893	7,625	268
Life annuity, 15-years certain	3,422	3,270	152
Joint survivorship:			
50% to contingent survivor	3,365	3,319	46
66-2/3% to contingent survivor	2,915	2,793	122
100% to contingent survivor	<u>9,045</u>	<u>8,760</u>	<u>285</u>
TOTAL RETIREMENT BENEFIT OPTIONS SELECTED	56,276	54,577	1,699
Disability retirements	3,681	3,680	1
Beneficiary (member died before retiring)	<u>528</u>	<u>527</u>	<u>1</u>
TOTAL – All types	<u>60,485</u>	<u>58,784</u>	<u>1,701</u>

\*System totals include 987 retirees receiving ad hoc benefits from Plan assets as reflected in Watson Wyatt Worldwide's actuarial certification statement.

